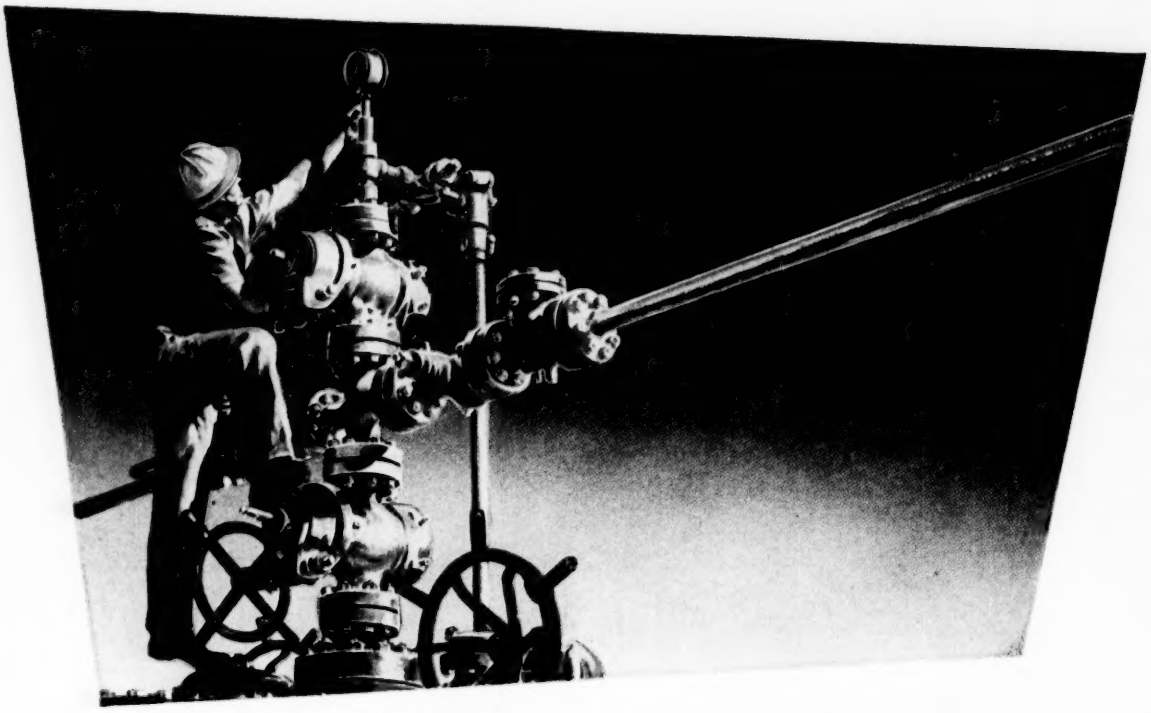
MANUFACTURERS RECORD

Featuring *Texas*



NO FUEL PROBLEMS HERE*

AGUA DULCE
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BASTROP
BEAUMONT
BECKVILLE
BELLAIRE
BIG SANDY
BLOOMINGTON
BRAZORIA
BRIDGE CITY
BRUNI
BUDA
BUNA
CALLIHAM
CAMPBELLTON
CARTHAGE
CENTER
CIBOLO
CLEVELAND
CONVERSE
CORRIGAN
CROCKETT
CROSBY
D'HANIS
DAYTON
DEVINE
DIBOLL
DITTLINGER
EDGEWOOD
ELGIN
ELKHART
FAIRBANKS
FALLS CITY
FANNETT
FLORESVILLE
GALENA PARK
GIDDINGS
GLADEWATER
GOODRICH
GRAND SALINE
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GREGORY
GROVETON
HALLETTSVILLE
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HONDO
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HUMBLE
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HUNTSVILLE
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JACINTO CITY
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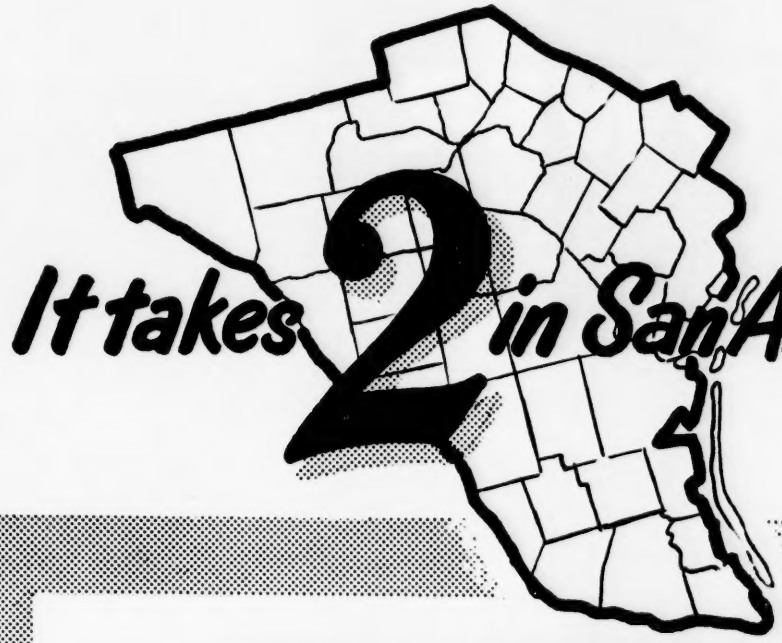
JASPER
JOURDANTON
KARNES CITY
KENEDY
KILGORE
KIRBYVILLE
KYLE
LACOSTE
LA GRANGE
LAKE JACKSON
LAREDO
LIBERTY
LINDALE
LIVINGSTON
LONGVIEW
LOVELADY
LUFKIN
McQUEENEY
MARSHALL
MATHIS
MINEOLA
MIRANDO CITY
MONT BELVIEU
MOONSHINE HILL
NACOGDOCHES
NEDERLAND
NEEDVILLE
NEW BRAUNFELS
NEW WILLARD
NORDHEIM
ODEM
OILTON
ORANGE
ORANGEFIELD
ORANGE GROVE
OVERTON
PASADENA
PINELAND
PLEASANTON
PORT ARTHUR
PORT NECHES
PORTLAND
POTH
POTEET
REFUGIO
ROMA
ROSENBERG
RUNGE
RUSK
SAN ANTONIO
SAN AUGUSTINE
SAN DIEGO
SAN MARCOS
SARATOGA
SCHERTZ
SCHULENBURG
SEGUIN
SHEPHERD
SINTON
SMITHVILLE
SOUR LAKE
TAFT
TENAHA
TIMPSON
TRINITY
TROUP
TYLER
UNIVERSAL CITY
VIDOR
VOTH
WASKOM
WEIMAR
WILLS POINT
WINNIE
WOODSBORO
YORKTOWN

These Texas communities are served from the pipe lines of United Gas.

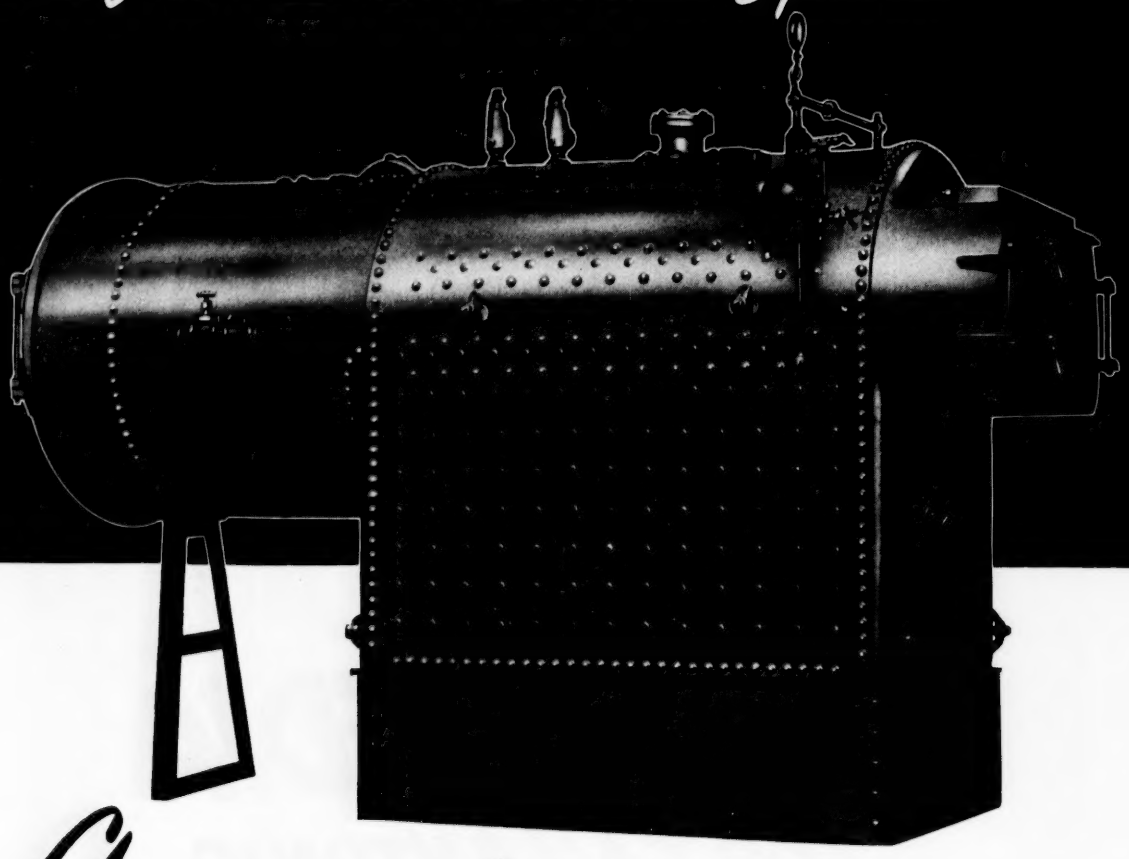
UNITED GAS SERVING THE *Gulf South*

UNITED GAS CORPORATION • UNITED GAS PIPE LINE COMPANY • UNION PRODUCING COMPANY



TODAY AS ALWAYS
THE
BASIC MEDIA
FOR SAN ANTONIO
AND SOUTH TEXAS

POWER
with POWER *to Spare*



Announcing

A NEW DOUBLE PASS ALL-PURPOSE INDUSTRIAL AND HEATING BOILER
SOUTHERN MADE FOR SOUTHERN TRADE

Made in sizes from 44 H.P. to 153 H.P. S.B.I. rating with pressure to 150 lbs. Designed for coal, gas or oil firing, the New Lucey Double Pass Boiler can be furnished complete as a package unit.

This boiler is in addition to our regular line of single pass fire box boilers which we have been making since 1918.

WRITE FOR BULLETIN NO. 153 FOR COMPLETE SPECIFICATIONS

LUCEY

BOILER *and* MANUFACTURING CORPORATION

CHATTANOOGA, TENNESSEE

1514 CHESTNUT ST.
CHATTANOOGA

LUCEY

1312 STERLING BLDG.
HOUSTON, TEXAS

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 122 November 1953 Number 11

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COVER ILLUSTRATION—General Motors' new $35,000,000 Buick-Oldsmobile-Pontiac Assembly plant at Arlington, Tex. will be completed next month.

MANUFACTURERS RECORD PUBLISHING CO.

Publishers of Manufacturers Record, Construction, Daily Construction Bulletin and Blue Book of Southern Progress.

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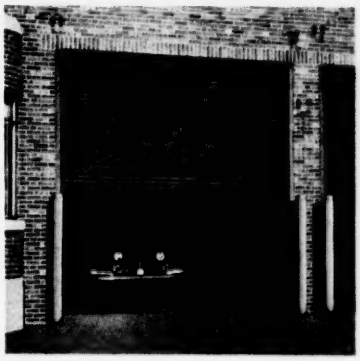
KINNEAR ROLLING DOORS

- Open upward smoothly, easily
- Save floor and wall space
- Coil completely out of way
- Rugged all-metal construction
- Extra all-around protection
- Motor or manual control



You get better door service at lower cost in Kinnear's combination of efficient *coiling upward action* and protective, all-metal, *interlocking-slat construction.* Kinnear Rolling Doors give you *maximum* use of space around doorways. They open and close with smooth, time-saving ease, year after year. They defy wind, weather, or intrusion. Electric push-button operation available, with remote controls if desired. Kinnear Rolling Doors are built in any size, for new or old construction. Write today.

The KINNEAR Manufacturing Co.

SAVING WAYS in DOORWAYS

Factories: 1600-20 Fields Ave., Columbus 16, Ohio
1742 Yosemite Ave., San Francisco 24, California
Offices and Agents in Principal Cities

KINNEAR ROLLING DOORS

AL SCHMIDT

How Would You Go About Taming a Giant?

FOR MILLIONS OF YEARS the Giant slept.

In 1863, Man disturbed his mighty slumber, tamed him and put him to work for the good of all.

The Giant was called Petroleum.

How did enterprising men go about harnessing this stupendous new source of energy?

Here is how they did *not* go about it:

They did *not* turn the problem over to a government agency.

They did *not* say, "Whale oil is good enough. Why bother with this newfangled stuff?"

They did *not* say, "Too many problems involved. Too many risks. We might lose our shirts."

They *did* get to work and promote risk capital for drilling.

They *did* make this new source of energy available to all the people.

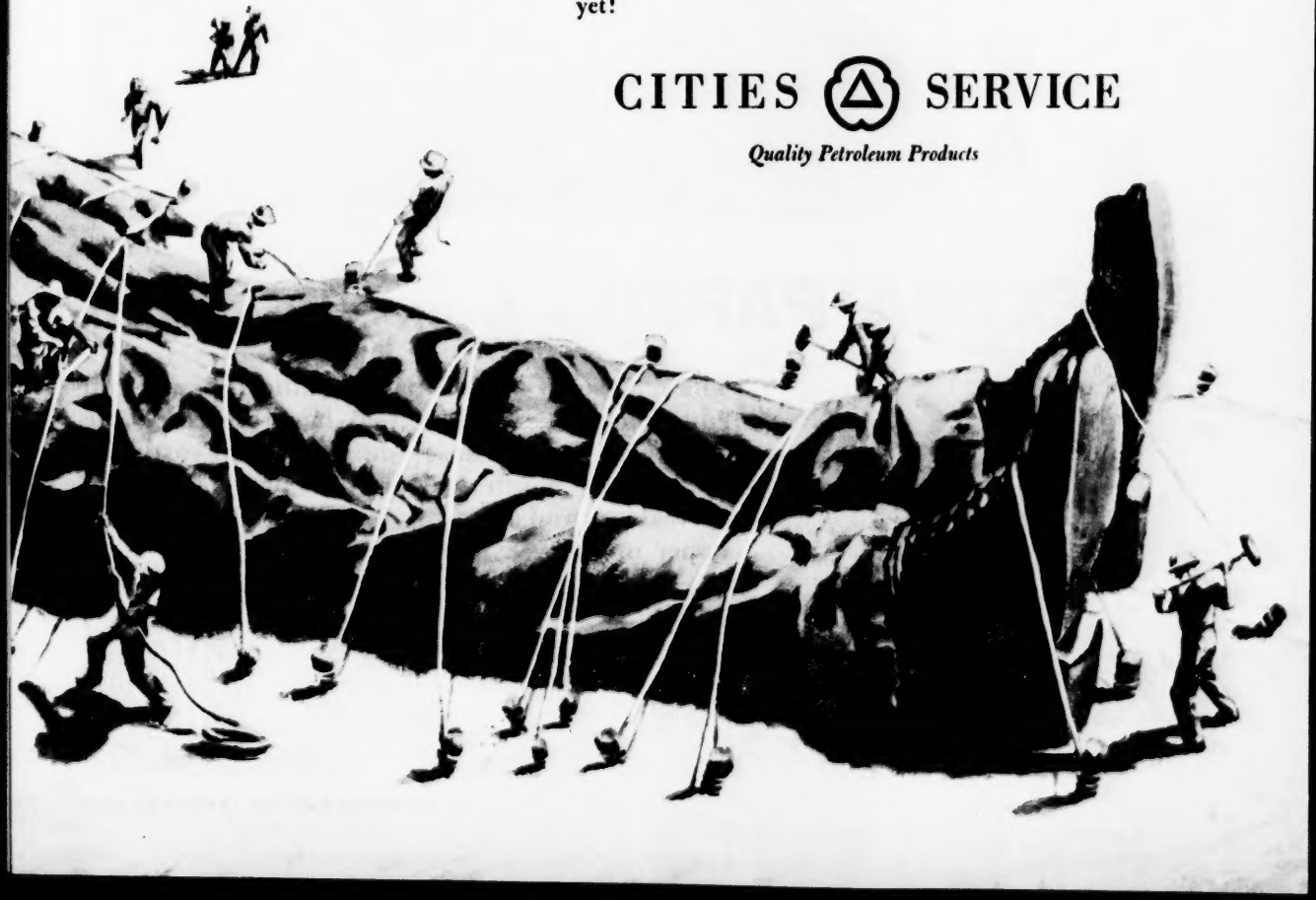
They *did* seek—and find—new ways to put the Giant's talents to work making hundreds of new products, creating thousands of new jobs.

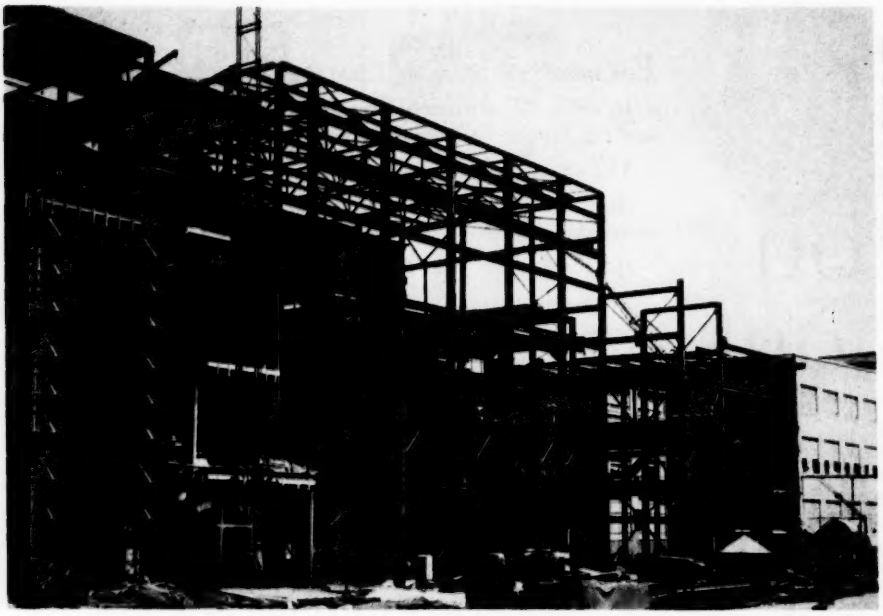
Among these energetic giant-tamers were men of Cities Service. They had begun as processors of whale oil. They were quick to see the possibilities of "rock oil." They were among the first to study the sciences of combustion and petro-chemistry.

The petroleum Giant is now a docile servant of mankind. It has made our lives easier in countless ways. But Cities Service researchers say it has muscles it hasn't even used yet!

CITIES SERVICE

Quality Petroleum Products

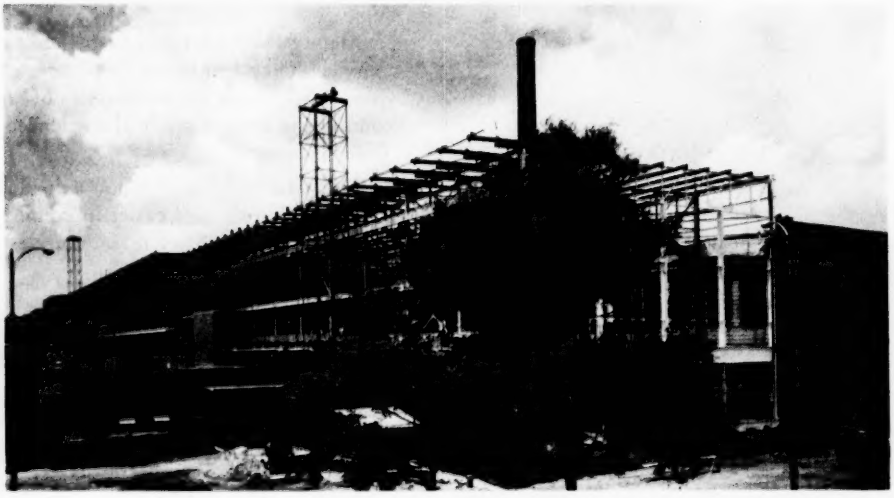




Left: Wash and screen room, built as an addition to the Southern Paperboard Corp. plant, Port Wentworth, Ga. J. E. Sirrine & Co., engineers. Daniel Construction Co., contractors. Structural steel fabricated by O'NEAL, 700 tons.

Below: Warehouse for paper storage, built as an addition to the Gulf States Paper Corp. plant, Tuscaloosa, Ala. Rust Engineering Co., general contractors. Structural steel fabricated by O'NEAL, 650 tons.

EXTRA



EXTRA PAPER—*from the South*

These are only two of many Southern paper mill additions for which O'Neal has fabricated the structural steel. Those additions have vastly increased the South's capacity to produce paper. O'Neal is proud of its part in helping the Southern paper industry expand.

O'NEAL STEEL WORKS

Birmingham 2, Ala.

If you're tracking down the answer to a plant location problem, then STOP . . . your solution is in the Land of Plenty. And the Norfolk and Western Railway's *Industrial and Agricultural Department* will help you find it.

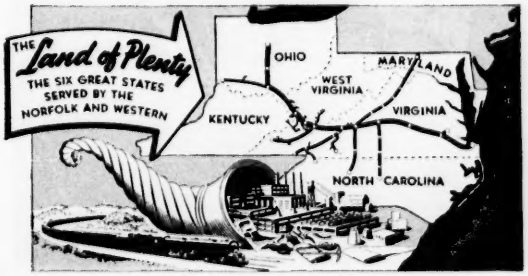
The men of this department are plant location specialists. They *know* the role of plant location in the competitive race that has spread into various phases of industry.

They are ready to help you as they have helped other manufacturers — both large and small — for half a century. They will give you the *facts* you need . . . in confidence, dependably and without obligation.

in the *Land of Plenty* you'll find

• Varied raw materials • Bituminous Coal nearby • Home-rooted manpower • Ample industrial power and water • Nearness to markets • Dependable N & W Rail service • Port of Norfolk on Hampton Roads • Room to grow • Favorable state & local tax policies • Fair real estate values • Excellent climate • Clean, progressive communities • Good research facilities • Prime dispersal advantages

Transportation is a major factor in good plant location. YOUR TRAFFIC MANAGER is a transportation expert. Consult him about transportation advantages for your plant.



Write, Wire or Call—

THE INDUSTRIAL AND AGRICULTURAL DEPT.
Drawer MR-625, (Telephone 4-1451, Ext. 474)
Norfolk and Western Railway
ROANOKE, VIRGINIA

Norfolk and Western RAILWAY

AT YOUR
FINGERTIPS!
ENVIRONMENT
RESEARCH
WATER
WATER . . . completion of the last two dams of the Lower Colorado River Authority provide six large reservoirs, making a continuous chain of dams and water extending 65 miles . . . total generating capacity of the hydro-electric plants is 275,000 KW.
RESEARCH . . . facilities at the University of Texas are unequalled in the Southwest . . . you may use the many bureaus of research in all fields of industry . . . the Off-Campus Research Center and Defense Laboratories also. In addition, for consultation, outstanding authorities in all professions are available.
ENVIRONMENT . . . perfect year-around climate . . . open-type structures for industries . . . sunshine and fair weather the rule . . . recreational facilities geared for outdoor living . . . plus cultural advantages of a city many times its size.
These three features give you what you are looking for . . . whether industrially, commercially, or for just plain living . . . AUSTIN is your city . . . where friendliness is combined with a well-rounded civic spirit.
Austin
TEXAS
MORE COMPLETE

BUSINESS TRENDS

Business Levels Off

While boom conditions still prevail, indications of business slackening grow stronger.

Those of longest standing and perhaps also of most intense effect are agricultural weakness, accumulation of inventories and consumer credit, with also now a gentle but perceptible lessening in consumer, business and government spending.

Another gentle but significant reminder is a creeping growth in business failures. The number of failures is still low according to the yardsticks of experience, but is 10 per cent higher now than at this time last year.

Significant also is renewed effort by the Federal Reserve Board of Governors to pump additional funds into the money market, obviously with the object of slowing the decline in expenditures on the part of the private sector of the national economy.

Slackening of consumer buying is not yet of a certified nature, but business outlays are unquestionably on the decrease.

WHAT DOES IT MEAN?

Is it to be inferred from the foregoing that a business recession is in the making—and inevitable?

To answer with a yes is to assume that American business ingenuity has been dissipated.

To answer with a no would be equally fatuous unless qualified with expectation of results from this very same ingenuity.

If a recession is to occur by reason of declining expenditures, it is the obligation of business ingenuity to see that the causes are removed.

In a nut shell this implies new sales attractions, readjusted prices where these are in order, and zealous attention to reduction of production costs.

IS IT GOOD OR BAD?

To live on the so called fat of the land is usually and generally considered to be a consummation greatly to be desired.

And there is no doubt that it has its attractions.

On the other hand it is well known that too much fat is debilitating—that the most real nourishment, physically or economically derives from the lean of the meat.

So it may be that the adjustments that now appear inevitable in sales procedure will in the end prove highly desirable.

WHAT OF THE SOUTH?

There is little at this time to say of the South that does not apply to the entire United States or vice versa.

The South has not this year had the upsurge in manufacturing that took place in the north middle west where automobiles, munitions, and mechanical appliances are turned out in such volume; but the Region has had outstanding growth in structural production—at a rate that could not be expected to be maintained year after year.

If there is adjustment due in the United States, it also is due in the South, and there are good grounds to believe that it will occur with smoothness fully equal to that of any other region.

NOTES FROM STATISTICAL AGENCIES

"Now, at only 88 per cent of capacity, more steel can be made than in the most active week of 1950 when steelmaking furnaces were being operated at 100 per cent of that year's weekly capacity." American Iron & Steel Institute.

Note—Steel operations recently declined below 95 per cent of capacity.

"Commercial, industrial and agricultural loans advanced in the week ended Oct. 28. The gain brought the level above the level on Oct. 1, and above the same week last year."—Federal Reserve Bank of Richmond.

"Member bank loans increased in August about as much as could be expected at that time of the year, but preliminary September figures show a smaller increase than in September last year."—Federal Reserve Bank of Atlanta.

"Industrial activity and retail sales in September and October were somewhat below earlier advanced levels . . . Total loans and investments at banks contracted from mid-September to mid-October, and yields on securities declined sharply. . . . Industrial production declined slightly in September following recovery in August from the usual vacation let-down in July."—Federal Reserve System.

"Demand for capital funds by corporations amounted to approximately $13 billion in the first half of 1953, up $3 billion from the comparable period last year."—U. S. Dept. of Commerce.

Note—Capital spending for the third quarter shows a decline, contrary to usual seasonality.

"Many firms in the farm machinery industry have already cut output sharply below the level of last year."—Federal Reserve Bank of Chicago.

"Preliminary figures for stocks of ferrous materials held by consumers on August 31 reached a new high of 8.2 million tons."—U. S. Dept. of the Interior.

"Hiring rates in the Nation's factories remained virtually unchanged between July and August, contrasting with the upswing usually reported at this time of year."—U. S. Dept. of Labor.

(Continued on page 13)

Plan for Safety at Danger Points

with Safety-Beam

Rear and front views of Safety-Beam installed along secondary road in Pennsylvania.

Wherever danger lurks along a highway—at sharp turns, embankments, bridge approaches—you can provide extra protection for motorists with Bethlehem Safety-Beam Guard Rail.

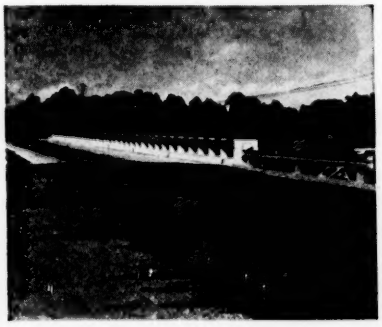
Sturdy Safety-Beam sections lock together in a continuous beam ready to meet the thrusts of runaway vehicles. These heavy sections of steel plate are bolted together on steel, wood or concrete posts to form a continuous impact-absorbing beam. When a vehicle strikes Safety-Beam, impact is absorbed by several adjacent posts, making it next to impossible to crash through the rail.

Safety-Beam is clearly visible at all times. It's easy to install, too, even by unskilled labor. No end anchor rods, special tools or complicated adjustments are required.

For more information about Bethlehem Safety-Beam Guard Rail—and other road-steel products—call the nearest Bethlehem sales office, or write to us at Bethlehem, Pa.

Traffic using approach to Chesapeake Bay Bridge, Maryland, has Safety-Beam protection.

Safety-Beam Guard Rail protects motorists at this small bridge on Route 79, in Arkansas.



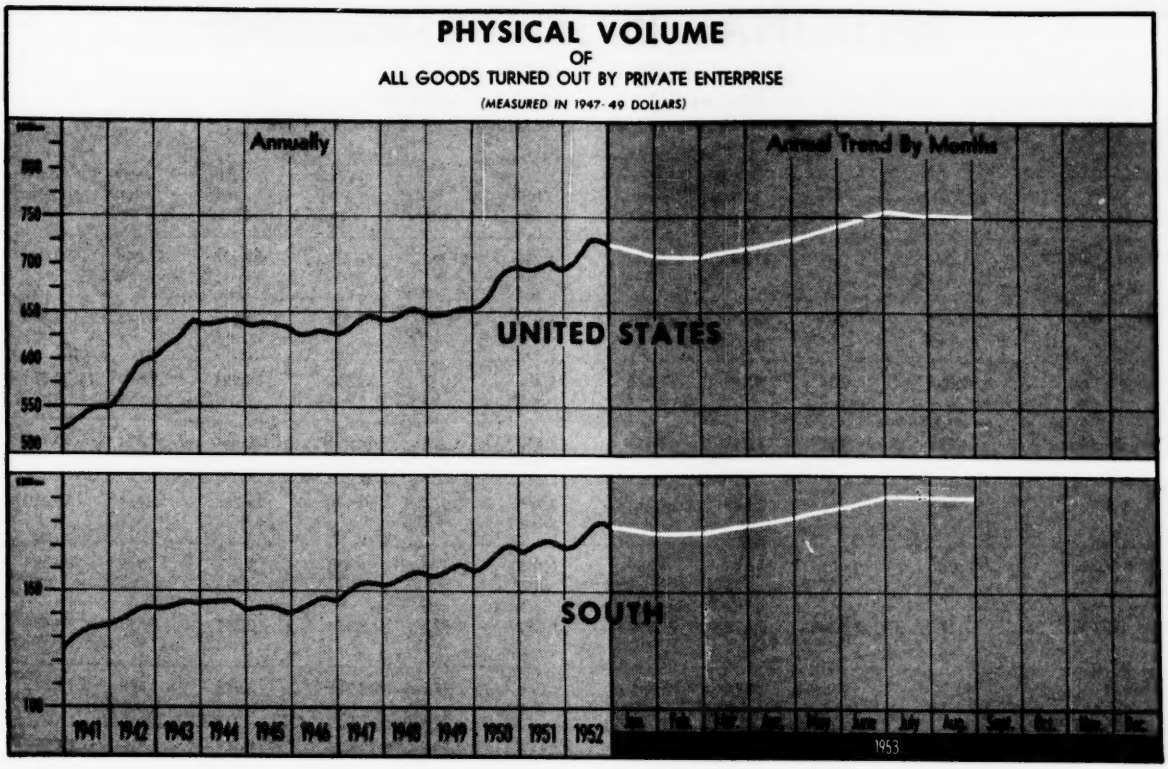
BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation
Export Distributor: Bethlehem Steel Export Corporation

STEEL FOR HIGHWAYS

Dowel Units • Reinforcing Bars • Guard Rail Posts
Bar Mats • Guard Rail • Wire Rope and Strand
Hollow Drill Steel • Spikes • Bolts and Nuts • Pipe
Sheet- and H-Piling • Fabricated Structural Steel
Timber Bridge Hardware • Tie-Rods

BETHLEHEM STEEL



Regional Indicators

(*Continued from page* 11)

Farm Marketings ($ Mil.)

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
South	$ 769	$ 703	$ 886
Other States	$1,717	$1,775	$1,980
United States	$2,486	$2,478	$2,874

Construction ($ Mil.)

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
South	$1,081	$1,094	$1,029
Other States	$2,241	$2,182	$2,101
United States	$3,322	$3,322	$3,130

Mineral Output ($ Mil.)

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
South	$ 586	$ 580	$ 581
Other States	$ 496	$ 492	$ 490
United States	$1,082	$1,072	$1,071

Manufacturing ($ Mil.)

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
South	$ 4,959	$ 4,810	$ 4,761
Other States	$17,861	$17,300	$16,812
United States	$22,820	$22,110	$21,573

National Indicators

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
Personal Income ($ Bil.)	$ 287.0	$ 287.5	$ 271.3
Ave. Weekly Earnings (Mfg.)	$ 71.69	$ 71.51	$ 67.23
Consumer Credit ($ Mil.)	$ 27,434	$ 27,217	$ 23,030
All Inventories ($ Mil.)	$ 78,761	$ 78,311	$ 72,714
Mfg. Inventories ($ Mil.)	$ 46,165	$ 45,792	$ 43,107
Trade Inventories ($ Mil.)	$ 32,596	$ 32,519	$ 29,607
Bank Debits ($ Mil.)	$134,589	$148,128	$122,200

	Aug. 1953	*Jul. 1953*	*Aug. 1952*
Ave. Weekly Hours (Mfg.)	40.5	40.4	40.5
Carloadings	4,022	2,964	3,882
Consumer Prices ('47-'49=100)	114.3	114.7	114.3
Retail Prices ('35-'39=100)	210.2	210.7	211.8
Wholesale Prices ('47-'49=100)	110.6	110.9	112.2
Construction costs ('47-'49=100)	125.2	125.2	120.4
Electric Output (mil. kw. hrs.)	44,497	43,927	39,803

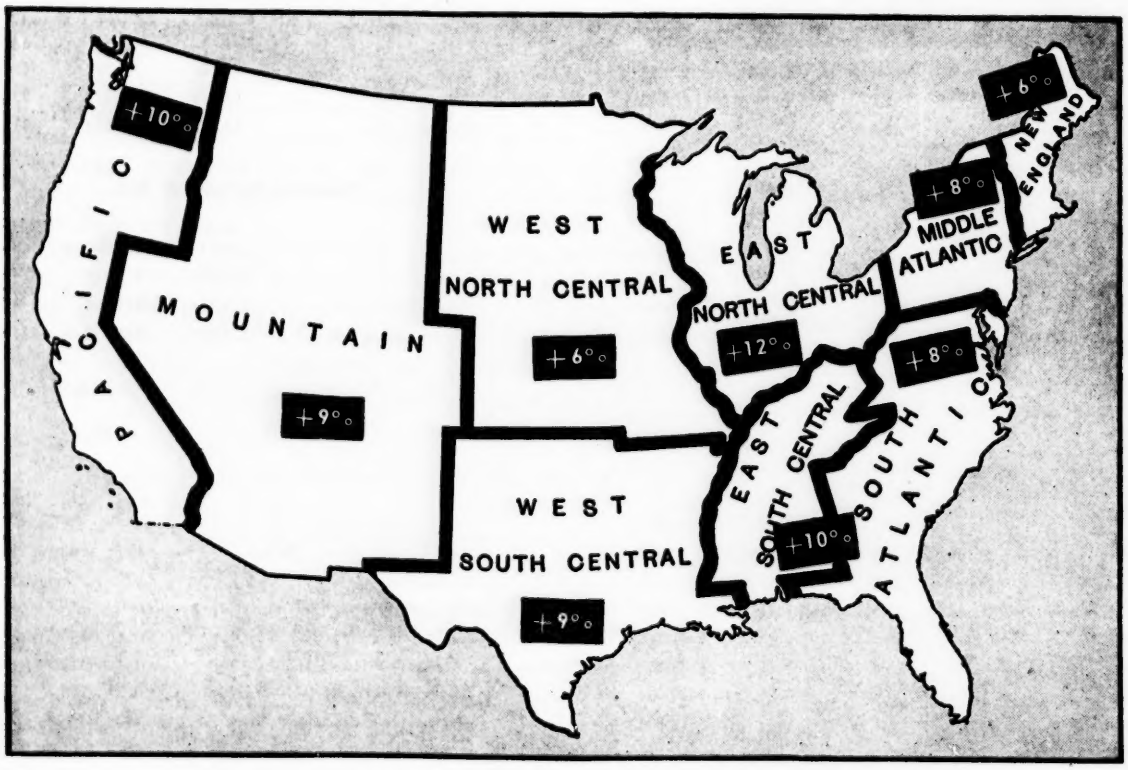
(*Continued on page* 14)

NATIONAL BUSINESS VOLUME

(*Continued from page 13*)

Business Volume By Regions ($ Million)
First 8 mos. of 1953 with gain (or loss) over First 8 mos. of 1952

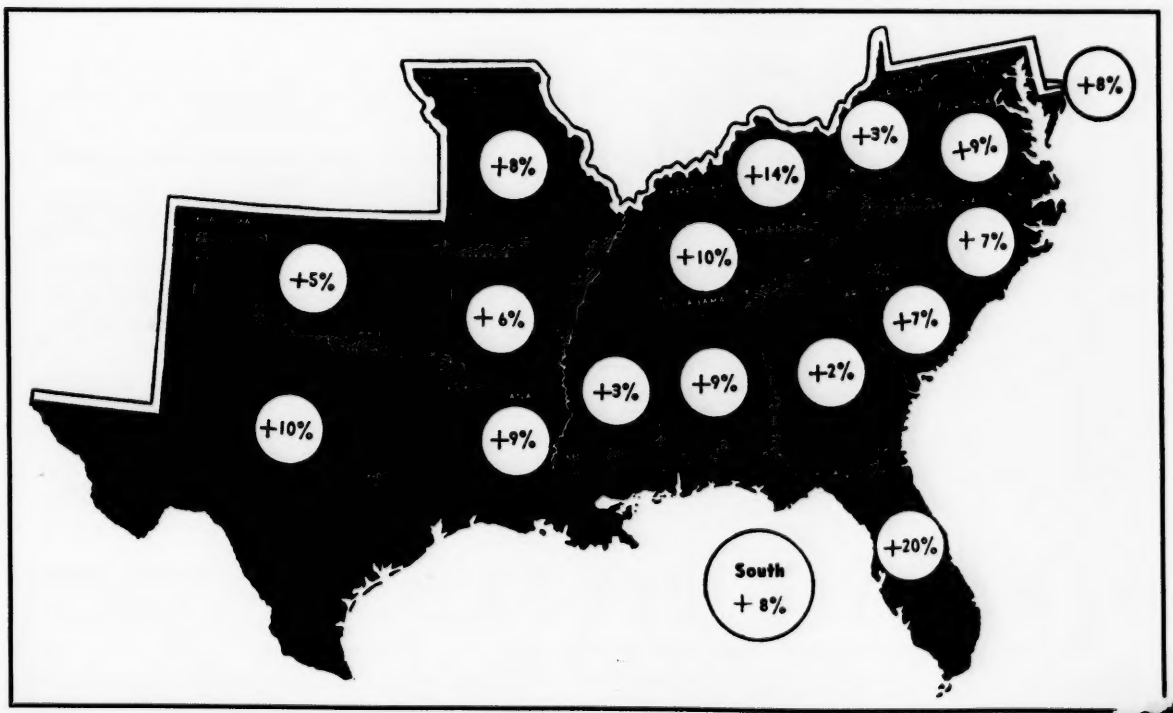
	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service Trade*	*Business Volume*
New. Eng.	514 —8%	$ 31 even	$1,209 +1%	$13,041 +8%	$1,236 even	$1,647 +5%	$6,662 even	$7,726 +13%	$1,244 +4%	$33,310 +6%
Mid. Atl.	1,416 —3%	803 —6%	4,060 +5%	43,205 +9%	5,918 +3%	6,317 +2%	42,859 +11%	22,313 +8%	6,046 +1%	132,937 +8%
E. N. Cen.	3,853 —4%	654 —2%	4,493 +7%	57,800 +16%	5,161 +5%	4,144 +4%	32,972 +15%	24,494 +7%	4,680 +4%	138,251 +12%
W. N. Cen.	4,886 —8%	685 +13%	1,719 +2%	13,891 +10%	2,469 +4%	1,771 +4%	16,296 +9%	10,551 +5%	1,701 +7%	53,969 +6%
S. Atl.	1,941 —5%	763 —9%	3,533 +3%	17,717 +9%	2,945 +2%	2,254 +9%	12,770 +2%	14,288 +14%	2,239 +5%	58,450 +8%
E. S. Cen.	1,052 —10%	488 —10%	1,343 +16%	7,257 +11%	1,165 +1%	764 +8%	6,436 +15%	5,739 +13%	899 +2%	25,143 +10%
W. S. Cen.	1,721 —20%	3,304 +7%	2,425 +11%	11,175 +10%	2,313 +2%	1,522 +5%	9,946 +13%	10,349 +13%	1,675 +7%	44,430 +9%
Mount.	1,090 —11%	988 +4%	891 +5%	2,839 +12%	1,019 +4%	521 +10%	3,356 +16%	3,936 +12%	685 +7%	15,325 +9%
Pacif.	2,070 —11%	838 +1%	2,662 +15%	16,534 +11%	2,672 +7%	2,295 +6%	13,472 +17%	12,017 +13%	2,755 +3%	55,315 +11%
U. S.	18,543 —8%	8,554 +2%	22,335 +7%	183,459 +12%	24,898 +3%	21,235 +5%	144,769 +12%	111,413 +10%	21,924 +3%	557,130 +9%

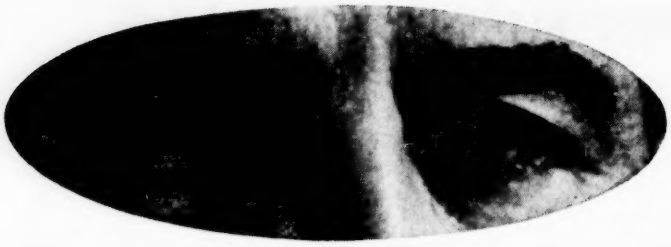


SOUTHERN BUSINESS VOLUME

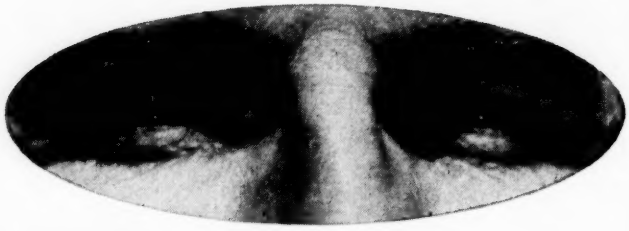
Business Volume By Regions ($ Million)
First 8 mos. of 1953 with gain (or loss) over First 8 mos. of 1952

	Farming	*Mining*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Service-Trade*	*Business Volume*
Ala.	$ 202 —22%	$ 88 even	$ 328 +3%	$2,013 +9%	$ 314 even	$ 225 +8%	$1,267 +12%	$1,474 +17%	$ 218 even	$6,129 +9%
Ark.	204 —26%	73 —8%	154 —10%	630 +8%	182 +1%	93 +10%	643 +17%	939 +13%	120 even	3,038 +6%
D. C.	— —	— —	191 +4%	158 even	193 +4%	250 +2%	1,094 +9%	1,384 +20%	221 even	3,491 +13%
Fla.	368 +4%	51 +8%	682 —24%	928 +16%	427 +2%	401 +18%	1,963 +30%	2,452 +20%	385 +13%	7,657 +20%
Ga.	430 —2%	22 —2%	395 even	2,712 +7%	428 +4%	316 +5%	1,923 —15%	1,954 +16%	352 +2%	8,532 +2%
Ky.	362 —4%	271 —15%	412 +37%	2,099 +12%	346 +2%	177 +12%	1,705 +25%	1,591 +13%	237 +2%	7,200 +14%
La.	158 —12%	542 +3%	507 +33%	2,117 +11%	471 even	221 even	1,512 +13%	1,572 +9%	237 +10%	7,337 +9%
Md.	194 —2%	12 even	481 +3%	2,844 +11%	426 +2%	368 +8%	1,781 +7%	1,851 +9%	291 +2%	8,248 +8%
Miss.	210 —7%	89 —4%	154 even	731 +6%	149 +2%	88 +8%	702 +2%	806 +5%	115 even	3,044 +3%
Mo.	604 —9%	65 —9%	521 +7%	4,339 +14%	772 +5%	609 +5%	5,466 +7%	2,962 +7%	602 +5%	15,940 +8%
N. C.	342 +1%	16 even	556 —14%	4,434 +7%	424 +6%	267 +4%	2,526 +12%	2,111 +12%	332 +4%	11,008 +7%
Okla.	378 —14%	413 +9%	268 +1%	1,231 +11%	298 +4%	198 even	1,302 +11%	1,419 +10%	232 —6%	5,739 +5%
S. C.	146 —30%	8 even	483 +10%	1,893 +6%	165 +3%	126 +16%	786 +11%	1,180 +14%	152 +6%	4,939 +7%
Tenn.	278 —11%	40 —10%	449 +15%	2,414 +15%	356 +2%	274 +7%	2,762 +10%	1,868 +9%	329 +11%	8,770 +10%
Tex.	981 —18%	2,276 +7%	1,496 +10%	7,197 +8%	1,362 +3%	1,010 +8%	6,489 +13%	6,419 +13%	1,086 +11%	28,316 +10%
Va.	282 —6%	81 —11%	515 +5%	3,023 +8%	499 +2%	348 +15%	1,668 +19%	2,050 +11%	309 +3%	8,775 +9%
W. Va.	103 —7%	573 —10%	131 —7%	1,217 +6%	308 even	115 +10%	748 +19%	1,001 even	152 +4%	4,348 +3%
South	5,242 —12%	4,620 +1%	7,723 +8%	39,980 +10%	7,120 +2%	5,086 +7%	34,337 +11%	33,033 +13%	5,370 +5%	142,511 +8%

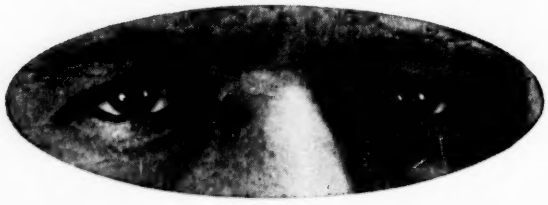




WHAT GOOD WOULD YOU EXPECT



STEEL MEN TO SEE



IN PLASTIC PIPE?

● Is it reasonable for men who make steel to recognize that plastic pipe can do things steel cannot?

Certainly they're quick to see steel do many things plastics can't.

Republic Steel produces plastic pipe. But Republic also lists among its products titanium sheet, aluminum windows and powdered iron. Each has qualities that outdo steel on some jobs.

Republic Steel Corporation is not only iron ore mines and blast furnaces. It is men earning a living by providing other men materials for them to use in earning their livings. It is men providing pipe where pipe is needed —seamless steel pipe; welded steel pipe (three types), and plastic pipe. Republic Steel's production of plastic pipe augments Republic's 3-STEP SERVICE FOR STEEL USERS:

1. **to make more and better kinds of steel than any one else:**
2. **so that we can recommend the precisely exact steel for your job:**
3. **then to share with you our unexcelled knowledge of how to fabricate steel in order that you can get the best results for your product.**

We see steel as the world's most versatile material — but certainly not the be-all and end-all for every job. This realistic attitude toward our main product is one reason why you can depend upon our recommendations.

REPUBLIC STEEL

GENERAL OFFICES • CLEVELAND 1, OHIO

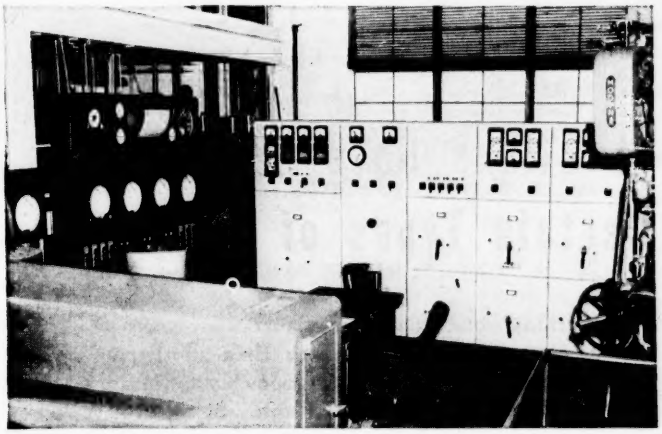
REPUBLIC STEEL

WORLD'S WIDEST RANGE OF STEELS AND STEEL PRODUCTS

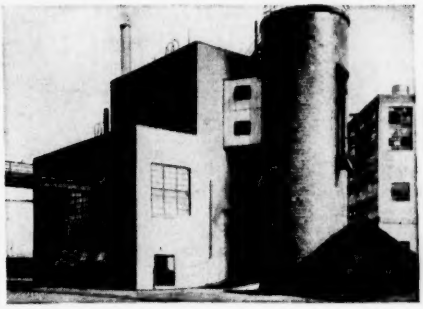
Quaker Oats REDUCES STEAM COSTS BY BURNING COAL THE MODERN WAY

"Our new coal installation produces steam at a cost of 32¢ per 1000 lbs. . . . reduces some operating costs about one half,"

says Walter H. Proescholdt
Asst. Chief Engineer
The Quaker Oats Company



Control center for combined boiler and turbine room operations at Quaker Oats' modern, new plant



To gain economy plus dependability, Quaker Oats Company modernized the boiler room in its paper-making plant. One efficient, coal-fired unit now supplies all steam needed for heating, processing, and power generation.

Boiler and turbine room operations combined. With automatic controls and coal- and ash-handling systems, two men per shift can operate the combination boiler and turbine generator room shown at left. Quaker Oats has found that burning coal the modern way certainly increases efficiency of operation and cuts operating costs.

Additional case histories, showing how plants of other types have saved money by burning coal the modern way, are available upon request.

Many power plants over ten years old are as dated in efficiency as the automobiles of the same period. Ton for ton, coal burned in a modern plant can produce 10% to 40% more power. Modern coal- and ash-handling equipment can also cut labor costs substantially.

Why not let a consulting engineer look over your plant? Chances are he can point out ways of remodeling so that you can burn bituminous coal the modern way . . . and save dollars.

It pays to burn coal efficiently, because coal is not only an economical, but a dependable fuel. Coal reserves are virtually unlimited. America's coal industry is the world's most efficient and progressive. Thus you're assured of a plentiful supply of coal at relatively stable prices for generations.

If you operate a steam plant, you can't afford to ignore these facts!

BITUMINOUS COAL in most places is today's lowest-cost fuel, and coal reserves in America are adequate for *hundreds of years to come.*

COAL production in the U.S.A. is highly mechanized and by far the most efficient in the world.

COAL prices will therefore remain the most stable of all fuels.

COAL is the safest fuel to store and use.

COAL is the fuel that industry counts on more and more—for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

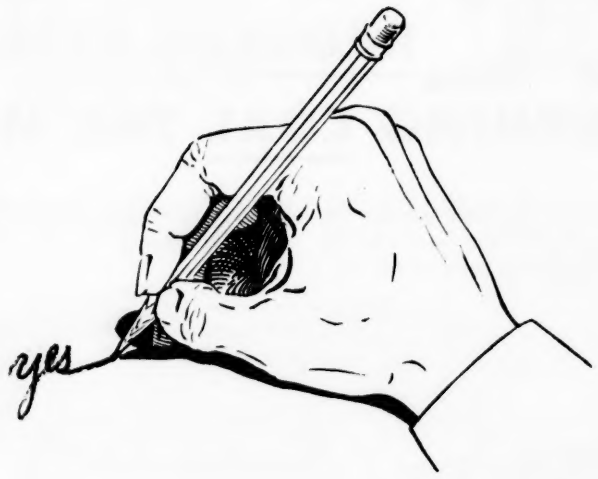
BITUMINOUS COAL INSTITUTE

A Department of National Coal Association
Southern Building, Washington 5, D. C.

FOR HIGH EFFICIENCY FOR LOW COST

YOU CAN COUNT ON COAL!

EVERY section of Alabama doesn't have EVERYTHING!



yes yes no yes yes yes no yes yes yes

(All Sections Have EVERYTHING for Certain Types of Industry)

Some sections, some towns in Alabama are more suitable for one type of industry than another. Some are preferable for "hard goods" manufacture, some for soft—some for both. Some are primarily best suited for manufacture—others more desirable from a distribution point of view —others score well on both points. Some are close to one type of raw material—such as minerals; others have as their basic raw materials products of field or forest. Many sections of Alabama can provide copious quantities of good water for industrial processes. Some sections can offer a ready supply of women workers; in others the greater availability is among men.

Our Industrial Development Department will gladly present an analysis based on your kind of operation, whether large or small, indicating sections of Alabama likely to be most suitable for you. There is no obligation. Write or 'phone

Industrial Development Department

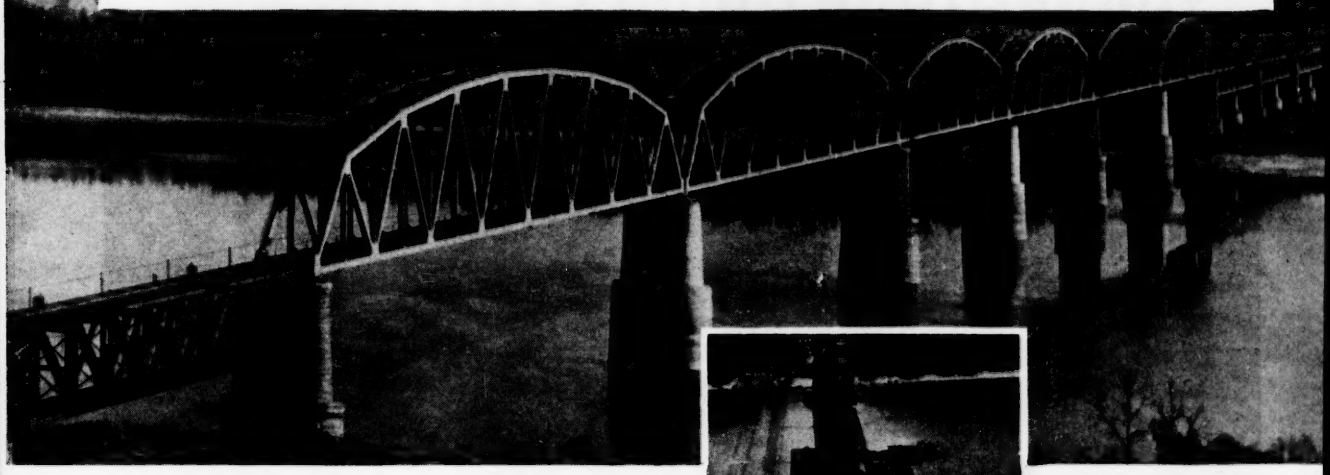
Alabama Power Company

Helping Develop Alabama

Birmingham 2, Alabama

BRIDGE MODERNIZED

with minimum interruption in traffic



AMERICAN BRIDGE uses unique method in replacing 61-year old structure on Illinois Central's busy main line

ONE of the most interesting modernization jobs in recent years is the new superstructure for Illinois Central's busy main line bridge over the Ohio River at Cairo, Illinois.

To accommodate today's heavier, faster traffic, this important railroad replaced its 61-year old nine-span structure with 12 modern spans.

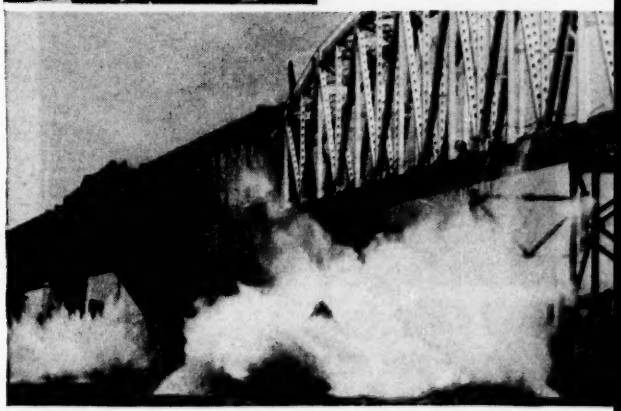
American Bridge, because of its skill, know-how and wide experience, was the logical choice to perform the major construction feat of building the new superstructure on the original piers with a minimum interruption in traffic.

The first old span of the bridge was rolled off its piers onto temporary falsework and the new 518-foot, 1,700-ton span moved into position and opened to service after a traffic interruption of only 20 hours. The old span was launched like a ship into the river 100 feet below for easy removal. The same procedure was followed span by span until the entire bridge was completed.

While this is the first time this method has been used on a job of such magnitude, it is a typical example of the part American Bridge is constantly playing to help our vital railroad systems meet the needs of growing America.

INTERESTING FACTS

- 6 deck-truss spans, 197' 7"
- 4 thru-truss spans, 400' 11½"
- 2 thru-truss spans, 518' 11"
- Bridge is single track.
- Steel used, 10,000 tons.
- Erecting procedure: Illinois Central R. R. and American Bridge
- Consulting Engineers: Modjeski and Masters.



AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION · GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

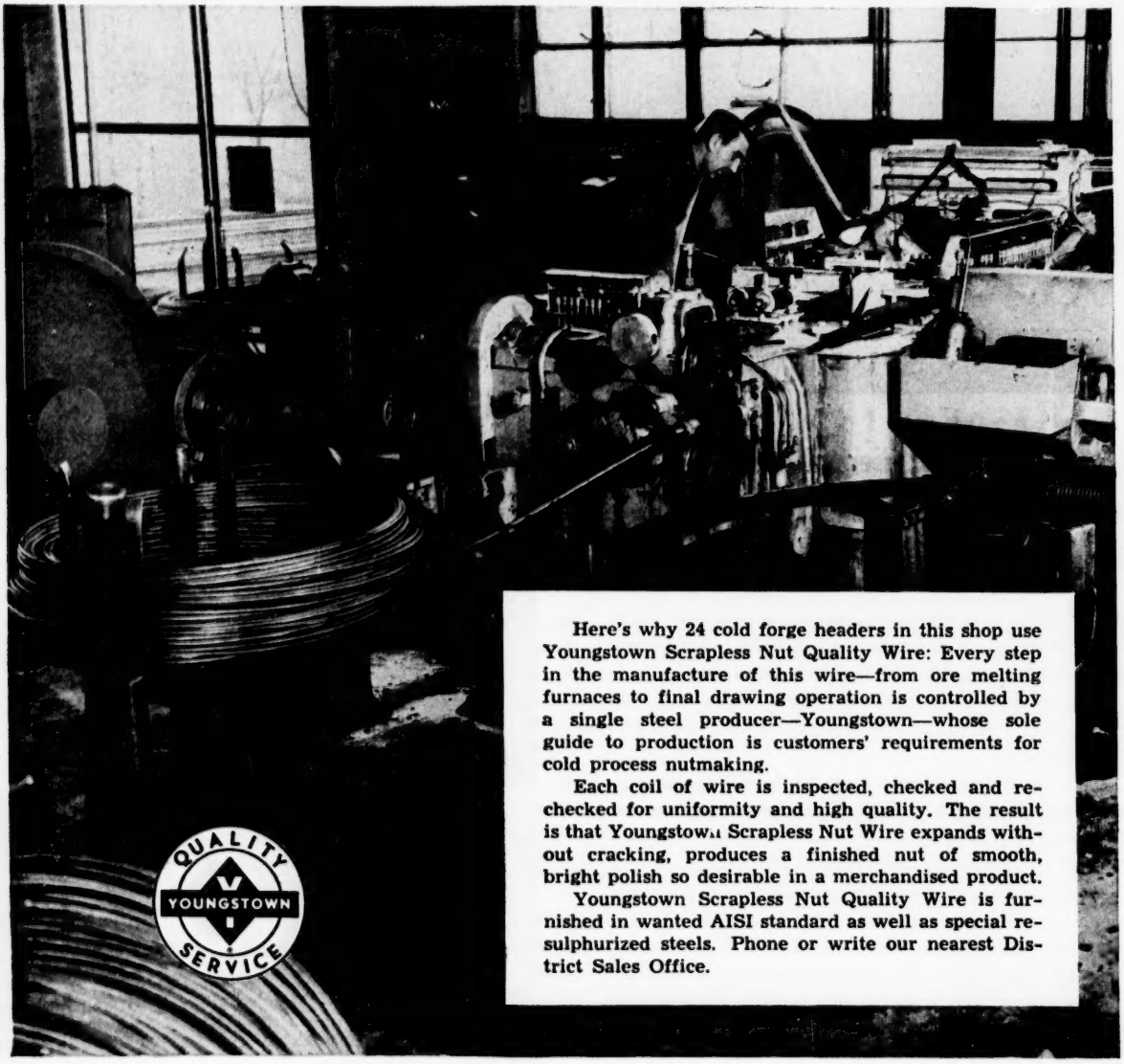
Contracting Offices in: AMBRIDGE · ATLANTA · BALTIMORE · BIRMINGHAM · BOSTON · CHICAGO · CINCINNATI · CLEVELAND · DALLAS · DENVER · DETROIT · ELMIRA · GARY · MEMPHIS MINNEAPOLIS · NEW YORK · PHILADELPHIA · PITTSBURGH · PORTLAND, ORE. · ROANOKE · ST. LOUIS · SAN FRANCISCO · TRENTON UNITED STATES STEEL EXPORT COMPANY, NEW YORK

AMERICAN BRIDGE

USS

UNITED STATES STEEL

NUTS DON'T CRACK WHEN FORGED FROM YOUNGSTOWN SCRAPLESS NUT WIRE



Here's why 24 cold forge headers in this shop use Youngstown Scrapless Nut Quality Wire: Every step in the manufacture of this wire—from ore melting furnaces to final drawing operation is controlled by a single steel producer—Youngstown—whose sole guide to production is customers' requirements for cold process nutmaking.

Each coil of wire is inspected, checked and rechecked for uniformity and high quality. The result is that Youngstown Scrapless Nut Wire expands without cracking, produces a finished nut of smooth, bright polish so desirable in a merchandised product.

Youngstown Scrapless Nut Quality Wire is furnished in wanted AISI standard as well as special resulphurized steels. Phone or write our nearest District Sales Office.

Youngstown SCRAPLESS NUT QUALITY WIRE

THE YOUNGSTOWN SHEET AND TUBE COMPANY *Manufacturers of Carbon, Alloy and Yoloy Steel*

General Offices: Youngstown, Ohio - Export Office: 500 Fifth Avenue, New York 36, N. Y.

PIPE AND TUBULAR PRODUCTS - CONDUIT - BARS - RODS - COLD FINISHED CARBON AND ALLOY BARS - SHEETS - PLATES - WIRE - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - RAILROAD TRACK SPIKES

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ALABAMA — E. I. duPont de Nemours & Co. purchased 850-acre plant site bet. Montgomery & Prattville, for possible future expansion.

BIRMINGHAM — Belle-Meade Division, United Biscuit Co. of America, Box 89, Nashville, Tenn., plans warehouse, 17th Place & 17th St., W.

BIRMINGHAM — Crawford Johnson Co., 3301 11th Ave., N. received bid from Sullivan Long & Hagerty, for $70,428 addition to Coca Cola plant; and from Dunn Construction Co. for $309,000 plant building. George P. Turner, American Life Bldg., Archt.

BIRMINGHAM — Drennen Motor Co., 401 S. 20th St., received bid from Ralph A. Smallman & Co., Inc., Birmingham, for $41,724 motor building. Van Keuren Davis & Co., 3004 Seventh Ave., S., Archt.

BIRMINGHAM — General Electric Corporation, 1804 Seventh Ave., N., received bids for office addition. Miller, Martin & Lewis, Title Guarantee Bldg., Birmingham, Archt.

BIRMINGHAM — Goslin-Birmingham Man Co., Inc., 10th Ave. & 35th Place, N., let contract to J. H. West & Son, for $43,192 alterations and additions to plant building. Charles H. McCauley, Jackson Bldg., Archt.

BIRMINGHAM — Nehi Bottling Co., James Pearce, 24th St., let contract to Daniels Construction Co., for $210,700 bottling plant and warehouse, Center St. Long & Gatling, Brown-Marx Bldg., Archt.

BIRMINGHAM — Pilot Broadcasting Co., George Mattison, Pres., let contract to Hunter & Underwood Construction Co. for $69,995 radio station WILD. Van Keuren Davis & Co., 3004 Seventh Ave., S., Archts.

BIRMINGHAM — South Flooring Co., 530 Third Ave., N., received bids for warehouse addition. D. O. Whilldin, Empire Bldg., Archt.

BIRMINGHAM — R. J. Thomas Co. c/o Radio Service Co., 1005 Fifth Ave., N., received bids for office and shop building. Wilmot C. Douglas, 2922 Seventh Ave., S., Archt.

BIRMINGHAM — Trailway Bus Co., 1900 Fourth Ave., N., let contract to Brice Building Co. for building alterations. Greer, Holmquist & Chambers, Stallings Bldg., Archt.

BIRMINGHAM — Wood Chevrolet Co., 228 S. 19th St., let contract to Brice Building Co. for $46,000 warehouse, 1816 Third Ave., S.

BIRMINGHAM — Wood Fruitticher Grocery Co. let contract to Richardson Construction Co. for $65,000 warehouse additions. P. S. Mewhinney, Archt.

HALEYVILLE — Fuller Lumber Co. plans $40,000 office building. Turner & Northington, Medical Arts Bldg., Florence, Archt.

LEEDS — Crown Cork & Seal Co., Baltimore, Md., received bid of $463,524 from J. F. Holley, 906 Sixth Ave., N., Birmingham, for plant building. Van Keuren Davis & Co., 3004 Seventh Ave., S., Birmingham, Archt.

LINDEN — City, W. G. Littler, Mayor, to build $100,000 textile plant. Charles H. McCauley, Jackson Bldg., Birmingham, Archt.

MONTGOMERY — Montgomery City Lines, Inc., 602 N. Court St., let contract to Bear Brothers for $93,000 office and garage building. Sherlock Smith & Adams, 303 Washington Ave., Archt.

TUSCALOOSA — Perry Creamery Co. received bid of $25,800 from Finley Electric Co. for power and lighting distribution system. Donald B. Schuyler, Archt.

TUSCALOOSA—Reichhold Chemicals, Inc., plan $10,000,000 expansion to improve and enlarge production facilities at 12 domestic plants; including $3,000,000 expansion at Tuscaloosa plant.

WOODWARD—Koppers Corporation, Inc., Pittsburgh, Pa., let contract to Gober & Mann Construction Co., Birmingham, for plant office. John W. Thomas, 600 N. 10th St., Birmingham, Archt.

ARKANSAS

FORT SMITH — J. A. Riggs Tractor Co., 424 E. 3rd St., Little Rock, let contract to Forsgren Brothers, Fort Smith, for $100,000 office and showroom. Bassham & Wheeler, Kennedy Bldg., Archts.

LITTLE ROCK — Independent Linen Service Co., Little Rock, plans $204,000 plant at 19th & Woodrow.

FLORIDA

CANTONMENT — The St. Regis Paper Co. let contract to Tidewater Construction Corporation, Norfolk, Va., for its expansion program.

CORAL GABLES — Gulf Oil Corporation, 461 S. Miami Ave., let contract to R. L. Alexander, 7785 S.W. 2nd St., Miami, for $39,000 service station, 1492 Dixie Highway. H. George Fink, 220 Coral Way, Archt.

CORAL GABLES — Southern Bell Telephone & Telegraph Co. let contract to J. Y. Gooch, Inc., 1205 Congress Bldg., Miami, for dial station. Armistead & Saggus, 1311 Candler Bldg., Atlanta, Ga., Archts.

DADE COUNTY — Nasco Incorporated received bid of $108,994 from Bradford Builders, Inc., 1101 Lincoln Road Bldg., Miami Beach, for factory and office building, N.W. 66th Ave. Igor B. Polevitzky, 250 N.E. 18th St., Miami, Archt.

DADE COUNTY — Public Gas Co., 721 N.W. 72nd St., Miami, let contract to Taylor Construction Co., 2875 N. Lejeune Road, Miami, for $26,640 warehouse.

DADE COUNTY — Southern Bell Telephone & Telegraph Co., 36 N.E. 2nd St., Miami, let contract to Barge-Thompson Co., 59 N.W. 10th St., Miami, for $131,144 addition to equipment building, 5920 S.W. 57th Ave. Armistead & Saggus, 1311 Candler Bldg., Atlanta, Archts.

DANIA — Riverside Laundry Co., 464 W. Flagler St., Miami, let contract to Witters Construction Co., 1297 S.E. 10th St., Hialeah, for $200,000 laundry, 303 N. Federal Highway.

DAYTONA BEACH — Mitchell & Alexander Lumber Co. let contract to Kenneth H. Smith, P.O. Box 1441, for $31,176 sales office building. MacDonough, Craig & Snead, Archts.

New and Expanding Plants
Reported in October
158
Total for
First Ten Months of 1953
1656
First Ten Months of 1952
1832

FORT LAUDERDALE — Lloyd A. Fry Roofing Co., 5818 Archer Road, Summit, Ill., let contract to Campbell, Lowrie & Lautermilch Corp., 400 W. Madison St., Chicago, Ill., for $150,000 mill building, S.E. 20th St. & S.E. 10th Ave.

HALLANDALE — Holbrook Buick, 207 N. Federal Highway, let contract to Crouch Brothers, 510 S.W. 2nd Ave., Dania, for $75,000 auto showroom, 900 N. Federal Highway. Stefan H. Zachar, 1630 Lenox Ave., Miami Beach, Archt.

JACKSONVILLE — Goodyear Tire & Rubber Co., Inc., Akron, Ohio, let contract to Hillyer & Lovan, Inc., Jacksonville, for District office building and warehouse.

LAKE WALES — Florida Citrus Canners Cooperative let contract to L. F. Martin for sub-zero storage warehouse.

MIAMI — American News Co., 2200 N.W. First Ave., received bid from William L. Lewis, 3052 N.W. 57th St., for $16,105 addition to warehouse. C. A. Cone, 731 S. W. 11th St., Archt.

MIAMI — Earlthe Corp., Earlthe Lipchin Co., 530 St. Paul Place, Baltimore, Md., let contract to T. F. LeJeune, 125 N.W. 54th St., for office building, S.E. 9th St. & Miami Ave. Charles Giller, Security Bldg., Archt.

MIAMI — Hudson Pontiac, Inc., 1622 N.E. 2nd Ave., let contract to The St. John Co., 295 N.E. 61st St., for $22,940 auto storage shed, 127 N.E. 16th St.

MIAMI — Hudson's Service Station, 4015 Laguna St., Coral Gables, received bids for addition to service station, 1185 N.W. 36th St. Tyrus T. Tripp, 1520 Ponce De Leon Blvd., Coral Gables, Archt.

MIAMI — Magic City Shade Co., 530 N.W. 4th Ave., let contract to Spector & Sons, 575 S.W. 22nd Ave., for $36,000 manufacturing building, 297 N.E. 67th St.

MIAMI — Miami Daily News, 600 Biscayne Blvd., let contract to Austin Co., 16112 Euclid Ave., East Cleveland, Ohio, for publishing building alterations, at 600 Biscayne Blvd.; cost $40,000.

MIAMI — Spector & Sons, 575 S.W. 22nd Ave., plan $30,390 cold storage warehouse, 6455 N.E. 3rd Ave.

MIAMI — Wilson & Co., 70 N.E. 11th St., let contract at $25,000 to M. R. Harrison Construction Corp., 5137 N.E. 2nd Ave., for alterations to meat packing warehouse, 38 N.W. 11th St.

OCALA — Pillans & Smith Co. let contract to Charles C. Fulford, for $18,297 warehouse. E. Bryan Duncan, Archt.

ORLANDO — Charles Venetian Blind Co., 1082 Edgewater Drive, plan showroom and storage warehouse. Hugo R. Broleman, Jr., 1216 Colonial Drive, Archt.

PENSACOLA — Chavis Construction Co. has contract for radio and TV station WEAR. James Gamble Rogers, II, Winter Park, Archt.

PENSACOLA — Southern Bell Telephone & Telegraph Co., Hurt Building, Atlanta, received bids for dial and toll building. Warren, Knight & Davis, Protective Life Bldg., Birmingham, Archts.

GEORGIA

ATLANTA — Eastern Air Lines, Inc., let contract to Beers Construction Co., 70 Ellis St., N.E., for operation building. Robert & Co., Assocs., 96 Poplar St., N.W., Archts.

ATLANTA—Westinghouse Electric Corporation, Box 2278, Pittsburgh, Pa., let contract to Henry C. Beck Co. for M & R Shop. Robert & Co. Associates, 96 Poplar St., N.W., Archts.

CLEVELAND — Ames Textile Corporation received bids for piping and misc. mechanical items. McPherson Co., 408 S. Main St., Greenville, S. C., Archts.-Engrs.

COLUMBUS — Swift, Pease, Davidson & Chapman, let contract to R. H. Wright, Jr. & Assocs., Box 1537, for $52,725 office building. James J. W. Biggers & Assocs., Archts.

DECATUR — Contractors Supplies Corporation received bids for sales and warehouse building. Francis M. Daves & Associates, 57 Eighth St., N.E., Atlanta, Archt.

MACON — Dixie Dairies, let contract to Louis Briggs Construction Co., Box 570, for ice cream and milk processing plant. Kuhlke & Wade, Augusta, Archts.

NAHUNTA & HOBOKEN — Bratley Telephone Co., Nahunta, let contract to Hayes Construction Co., Brunswick, for $12,488 headquarters building.

SAVANNAH — American Cyanamid Co. received bids for chemical plant. Robert & Co. Associates, Atlanta, Archt.

SAVANNAH — Chemical Construction Corporation let contract to Duval Engineering & Contracting Co., Jacksonville, Fla., for roadway and grading site for American Cyanamid Co's. titanium dioxide plant under construction.

LOUISIANA

BATON ROUGE — Esso Standard Oil Co. plans addition to refinery at Baton Rouge.

BATON ROUGE — Gulf Refining Co. plans $200,000 pipe line terminal.

HARVEY — Schlumberger Well Surveying Corporation received bids for 2 new one-story industrial buildings. Claude E. Hooton, 509 St. Ann St., New Orleans, Archt.

LAKE CHARLES — J. Weingarten, Inc., P.O. Box 961, for super market on Ryan St. Finger & Rustay, 711 C & I Life Bldg., Houston, Tex., Archts.

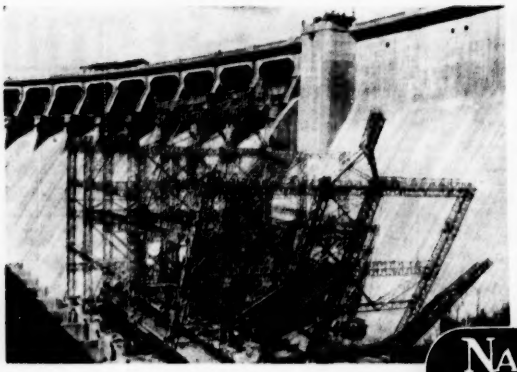
NEW ORLEANS — Diamond Paper Co., 416 S. Peters St., received bid from Upham Engineering Co., Inc., 1211 Julia St., for building alterations.

NEW ORLEANS — Esso Standard Oil Co., 1410 Canal St., let contract to Roy A. Evers, 1310 Poland Ave., for new standard 3-bay Esso service station. Prytania & Lyons Sts.

NEW ORLEANS — J. T. Gibbons, Inc., 2700 Howard Ave., let contract to Bartley & Binnings, 433 Gravier St., for $227,648 renovation of feed mill. Emilia Levy, 1029 Short St., Archt.

NEW ORLEANS — Jefferson Cold Storage Co. plans 2-story cold storage plant and office

(Continued on page 22)



THE Nashville Bridge Company will gladly quote on structural steel requirements anywhere in the South and Southwest. Our skill in the fabrication and erection of intricate steel structures is well-known. We are particularly qualified to supply the Power Distributing Industries with transmission towers and switchyard structures;—hot-dip galvanized after fabrication. Fabrication and erection of both steel and machinery for movable type bridges is a specialty. Look to Nashville for simple steel requirements as well as intricate structural jobs.

Plants and offices in Nashville, Tennessee and Bessemer, Alabama. We also own and operate the Bessemer Galvanizing Works—largest galvanizing plant in the South.

NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. — BESSEMER, ALA.

NEW AND EXPANDING PLANTS

(*Continued from page* 21)

building in Jefferson Parish. Curtis & Davis, 822 Perdido St., Archts.

NEW ORLEANS — L. & N. Railroad Co., Mobile, received bids for construction of new interlocking tower building at L. & N. & N.O. Northeastern crossing.

NEW ORLEANS — Richard A. Mackenroth, 629½ Baronne St., received bid of $28,334 from Roy A. Evers, 1310 Poland Ave., for new Texaco Service Station, Amonaster Ave. & N. Derbigny St.

NEW ORLEANS — Pontchartrain Motor Co. received bid of $534,978 from Gervais F. Favrot Co., Inc., Balter Bldg., for new 2-story auto sales and service building, 701 Baronne St. Edward B. Silverstein, 302 Magazine St., Archt.

NEW ORLEANS — Southern Bell Telephone & Telegraph Co., 1215 Prytania St., received bids for dial telephone office building at Hancock & Anson Sts.; cost $300,000. Warren, Knight & Davis, Protective Life Bldg., Birmingham, Ala., Archts.

RESERVE — Reserve Telephone Co. let contract to Perrilliat-Rickey Construction Co., Inc., P.O. Box 7027, 1530 S. Rendon St., New Orleans, for $46,000 office building. L. Dufrechou, 1310 Esplanade Ave., New Orleans, Archt.

SHREVEPORT — Cotton Baking Co. let contract to Allen Construction Co., P.O. Box 3044, Q. B. Station, for new addition and alterations to present baking plant, 2524 Samford Ave.; approx. cost $200,000.

SHREVEPORT — Rountree Olds-Cadillac Co., Inc., let contract at $353,200 to Werner Co., 1320 Pierre Ave., for new auto sales, office and service building at Southern and St. Vincent Aves. Charles S. Barr, 4503 Gilbert Drive, Archt.

MARYLAND

BALTIMORE — American Bitumuls & Asphalt Co., 1955 Chesapeake Ave., to build $18,000 stack, 1901 Chesapeake Ave.

BALTIMORE — David W. Chertkof let contract to Franklin Construction Co. for $15,000 addition to manufacturing building, 2220-2222 Severn St.

BALTIMORE — Mitchel S. Eisenberg, 5804 Narcissus St., plan $35,000 office and plant, 4207-9 Menlo Drive. Fenton & Lichtig, 2023 Maryland Ave., Archts.

BALTIMORE — Esso Standard Oil Co. plans multi-million dollar bulk and other facilities to Canton refinery, near Baltimore.

BALTIMORE — Flight Refueling Inc., Charles W. Newhall, Jr., Pres., Danbury, Conn., announced plans to move to Baltimore and construct plant on 26 acres immediately adjacent to eastern end of Friendship's instrument runway.

BALTIMORE — Harbison-Walker Refractories Co., 1200 Patapsco Ave., let contract to Molnar-McGovern, 703 Morningside Drive, Towson, Md., for $18,000 building addition.

BALTIMORE — Latrobe, Inc., plans $500,000 office building, 900 block N. Charles St. John Carroll Dunn, 717 Washington Place, Archt.

BALTIMORE — Motor Cargo, Inc., 1501 S. Caton Ave., let contract to Henry A. Knott, Inc., 2406 Greenmount Ave., for motor freight terminal, Benson Ave. near Patapsco Ave. Van Rensselaer P. Saxe, 100 W. Monument St., Archt.

BALTIMORE — Schluderberger-Kurdle Co. will receive bids for plant addition, 3800 E. Baltimore St. Henschien, Everds & Crombie, Chicago, Archts.

BALTIMORE — Sheet Metal Coating & Lithograph Co. let contract to Smith & DeCorse, Inc., 1506 York Road, for $15,000 storage building, 1301 W. Hamburg St.

BALTIMORE — Socony-Vacuum Oil Co., Inc., 26 Broadway, New York, received bids for office and petroleum terminal, Fairfield Rd. near Chesapeake Ave.

BALTIMORE — United Iron & Metal Co. received bid from Baltimore Contractors, 711 S. Central Ave. for alterations to scrap yard, Catherine St. & B. & O. R.R. Bonnet & Brandt, 605 Park Ave., Archts.

TEXAS — Hayes Manufacturing Corporation, Grand Rapids, Michigan, (for Aircraft Armaments, Inc., 4415 Reisterstown Road), received bids for aircraft armaments facilities. Cyril H. Hebrank, 20 E. Lexington St., Baltimore, Archt.

MISSISSIPPI

BATESVILLE — Mayor and Board of Aldermen received bids for heating and air conditioning equipment for Batesville Company plant. Pritchard & Nickles, Tunica, Archts-Engrs.

COLUMBIA — Mayor and Board of Aldermen received bids for one-story furniture manufacturing building for New Orleans Manufacturing Co.

JACKSON — Standard Life Broadcasting Co., Inc., received bid from E. F. Watkins Construction Co., P.O. Box 4301, Fondren, for $56,716 television transmitter station and studio building. Spain & Biggers, Deposit Guaranty Bank Bldg., Archt-Engrs.

MONTICELLO — Board of Supervisors of Lawrence County received bids for 75,000 gal. elevated water storage tank and automatic sprinkler system for Phalo Corporation plant building. Spain & Biggers, Deposit Guaranty Bank Bldg., Jackson, Archts.-Engrs.

TISHOMINGO — Board of Supervisors of Tishomingo County, Iuka, let contract to J. E. Staub & Co., Fulton, for $84,900 factory building for Blue Bell Mid-South, Inc. Feemster & Connet, P.O. Box 327, Tupelo, Archts.

YAZOO CITY — Board of Supervisors let contract at $278,889 to L. B. Priester & Son, Highway 80 East, Jackson, for additions to structural steel and aluminum ammonium nitrate building; and to Layne-Central Co., Box 2222, West Jackson Station, Jackson, at $37,774 for water wells for Mississippi Chemical Corporation's plant.

MISSOURI

INDEPENDENCE — Dover Manufacturing Co., J. F. Pritchard, Jr., Pres., plans $42,000 factory building.

NEWBURG — Rawlings Manufacturing Co. has plans for $58,000 addition to plant.

ST. LOUIS — American Locomotive Co., New York, plans $400,000 warehouse and office building.

ST. LOUIS — Re Pel Mar Co., Inc., 6135 Manchester Ave., let contract to Harry LaBoube, 7404 Devonshire, for factory, 852 Blow St.

(*Continued on page* 147)

TRINITY INDUSTRIAL DISTRICT

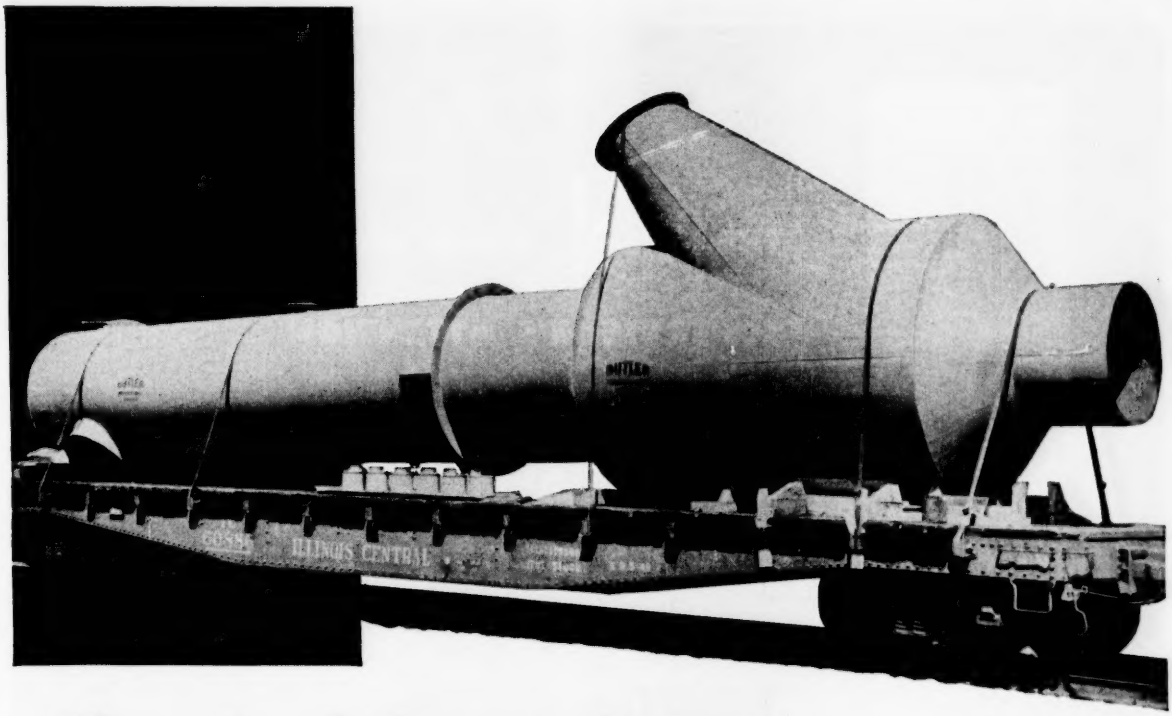
"Under the Skyline of Dallas"

the new home of

C. H. MASLAND AND SONS

For information about the Trinity Industrial District consult your real estate broker or . . .

INDUSTRIAL PROPERTIES CORPORATION, 401 Republic Bank Bldg., Dallas, RI-6552



Chemical Spray Tower

...another BUTLER custom-built steel product for the chemical industry

This large spray tower is off to work in the chemical industry. It will collect and dissipate harmful mists and noxious fumes before they contaminate products in process or injure plant personnel.

Butler has the skilled engineers and craftsmen, and modern plant facilities to *do the job right.* You can get *exactly* what you need—whether it's one special vessel as big as a flatcar or thousands of a production item—in a hurry! More than 50 years' experience in steel fabrication is your guarantee of Butler quality.

BUTLER CAN DO IT BETTER

Steel Plate Work • Stainless Steel Fabrication • Code Pressure Vessels
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BUTLER® STEEL PRODUCTS

Manufacturers of Oil Equipment
Steel Buildings • Farm Equipment
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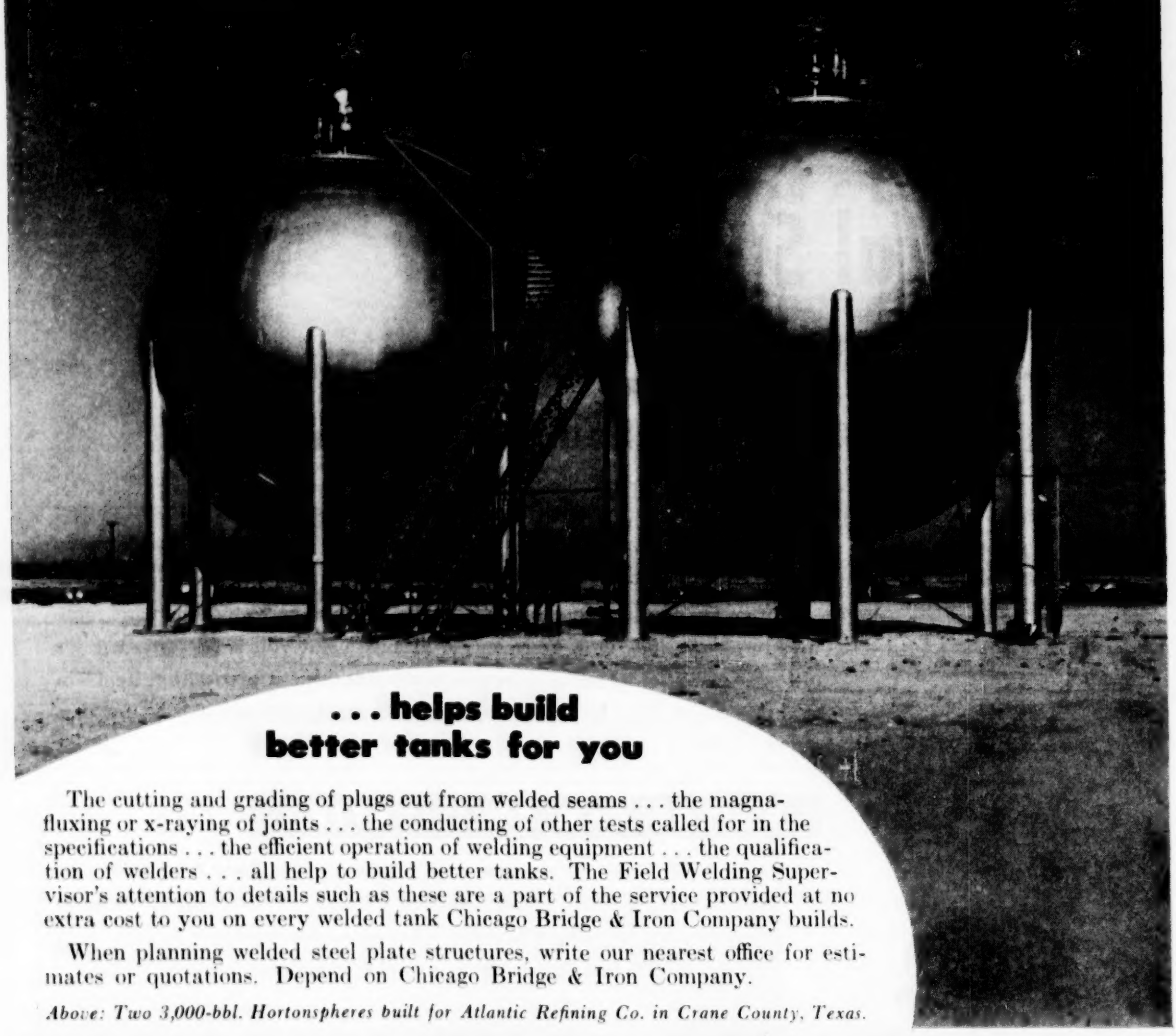
Factories located at Kansas City, Mo.
Galesburg, Ill. • Richmond, Calif.
Birmingham, Ala. • Minneapolis, Minn.

Write, phone or wire for complete information, today. Remember, the Butler plant at Birmingham, Alabama, is ideally located for fast, low-cost shipments through the South.

BUTLER MANUFACTURING COMPANY

904 Avenue W, Ensley, Birmingham 8, Alabama

THE C&I FIELD WELDING SUPERVISOR'S ATTENTION TO DETAILS . . .



. . . helps build better tanks for you

The cutting and grading of plugs cut from welded seams . . . the magnafluxing or x-raying of joints . . . the conducting of other tests called for in the specifications . . . the efficient operation of welding equipment . . . the qualification of welders . . . all help to build better tanks. The Field Welding Supervisor's attention to details such as these are a part of the service provided at no extra cost to you on every welded tank Chicago Bridge & Iron Company builds.

When planning welded steel plate structures, write our nearest office for estimates or quotations. Depend on Chicago Bridge & Iron Company.

Above: Two 3,000-bbl. Hortonspheres built for Atlantic Refining Co. in Crane County, Texas.

CHICAGO BRIDGE & IRON COMPANY

Atlanta 3 .....2145 Healey Bldg.
Birmingham 1 .....1530 North Fiftieth St.
Boston 10 .....1020—201 Devonshire St.
Chicago 4 .....2106 McCormick Bldg.
Cleveland 15 .....2216 Midland Bldg.
Detroit 26 .....1510 Lafayette Bldg.
Havana .....402 Abreu Bldg.
Houston 2 .....2114 C & I Life Bldg.
Los Angeles 17 ..1517 General Petroleum Bldg.
New York 6 .....3313—165 Broadway Bldg.
Philadelphia 3..1619—1700 Walnut Street Bldg.
Pittsburgh 19 .....3223 Alcoa Bldg.
San Francisco 4 .....1540—200 Bush St.
Seattle 1 .....1320 Henry Bldg.
Tulsa 3 .....1611 Hunt Bldg.

PLANTS IN BIRMINGHAM, CHICAGO, SALT LAKE CITY AND GREENVILLE, PENNSYLVANIA

A Friendly Conference in CANE-BOTTOMED CHAIRS

When the world's oldest manufacturer of zippers asked the Georgia Power Company about a favorable site for a southern plant, the *friendly* little city of Cleveland, Ga., was a natural choice.

Representatives of both companies met with officials of the town. This conference, at the courthouse with everyone seated in cane-bottomed chairs, was as effective as it was informal. With the ready cooperation of the city and county officials, problems were quickly cleared. Requirements for the plant were discussed and settled on the spot. Today the industry is well-established with more than 100 employees.

An intimate knowledge of the people in every part of the *friendly* Southern city area enables these companies to provide specialized assistance.

SOUTHERN CITY, U. S. A.

This is Southern City, U.S.A.
our way of expressing as a unit the vast Southeast area served by the four associated electric power companies in The Southern Company System.

Write, wire or telephone any of the operating companies below for information.

ALABAMA POWER COMPANY,
Birmingham, Alabama

GEORGIA POWER COMPANY,
Atlanta, Georgia

GULF POWER COMPANY,
Pensacola, Florida

MISSISSIPPI POWER COMPANY,
Gulfport, Mississippi

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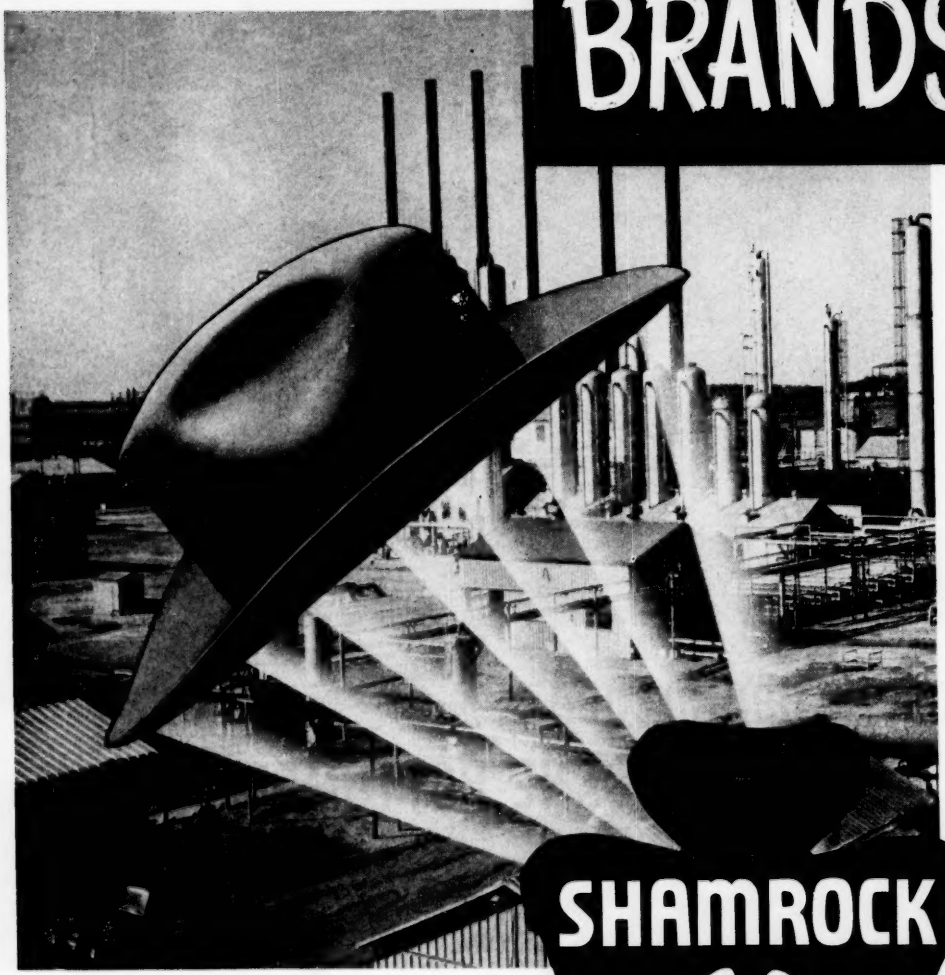
THE SOUTHERN COMPANY,
Birmingham • Atlanta

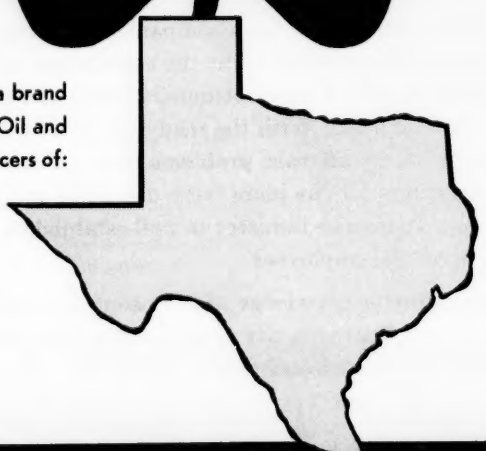
In a country famous for BRANDS!



SHAMROCK

IN the broad brim country of famous brands, a brand famous for quality is Shamrock. The Shamrock Oil and Gas Corporation is recognized as first-line producers of:

GASOLINES • MOTOR OILS
GREASES • DIESEL FUEL
BUTANE • PROPANE
ROAD SPECIFICATION ASPHALT



THE SHAMROCK OIL AND GAS CORPORATION AMARILLO, TEXAS

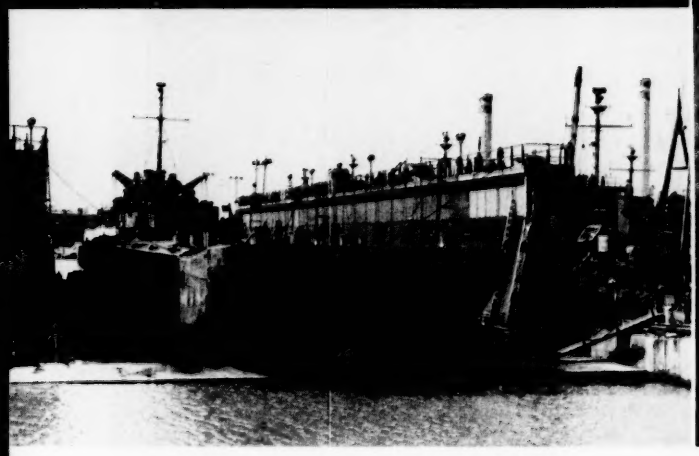
Levingston

OFFERS YOU THESE SERVICES-

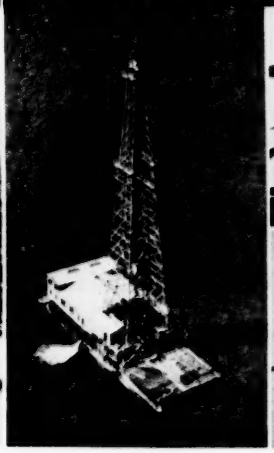
CONSTRUCTION: WELDED STEEL TUGS & BARGES

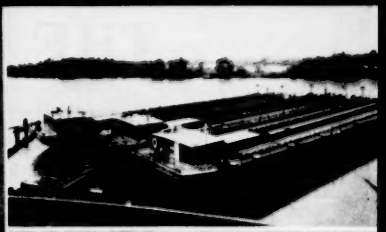
CONVERSION: OF COMBAT VESSELS FOR COMMERCIAL USE

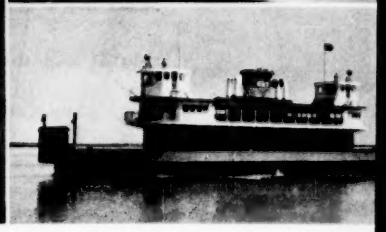
MAINTENANCE: MARINE WAYS AND DRY DOCK FOR ALL WORKBOATS



SPECIALTIES: DRILLING AND BOILER BARGES • PASSENGER AND RAIL FERRIES







Whatever your requirements may be in the work boat field, Levingston is prepared to give you prompt and dependable service.

Levingston **SHIPBUILDING COMPANY**

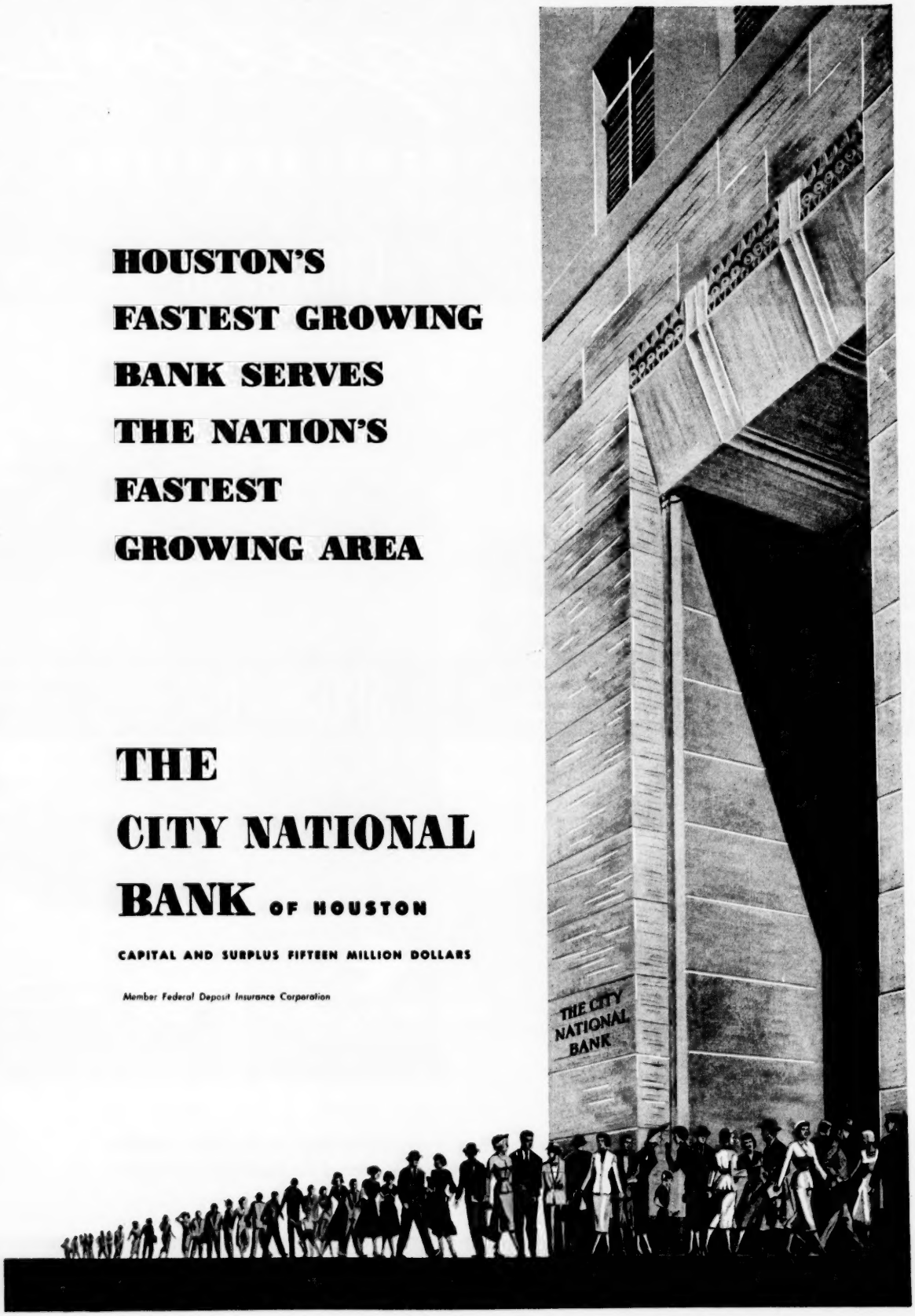
ORANGE, TEXAS

HOUSTON'S FASTEST GROWING BANK SERVES THE NATION'S FASTEST GROWING AREA

THE CITY NATIONAL BANK OF HOUSTON

CAPITAL AND SURPLUS FIFTEEN MILLION DOLLARS

Member Federal Deposit Insurance Corporation



the Eyes of the Nation are on the

Southland

The Southland is no longer only the agrarian giant of the nation . . . it has become a giant of industry also. Daily, multi-million dollar industries arise throughout the South. Industry-sponsored and university research laboratories are developing the South's great and heretofore barely tapped resources . . . water, petroleum, natural gas, minerals and forests . . . bringing about phenomenal developments in chemicals, hydro-electric energy, electrical goods, metals, synthetics. And the traditional industries of the South . . . textiles, wood products, tobacco, livestock, fruits and vegetables . . . continue in growth and importance.

In this newly diversified Southland, Southern leadership has established a wise balance between agriculture and industry. The new is welcomed and encouraged . . . and the old ways are protected so that today, soil conservation and rangeland improvements are major projects. Add to this long-range policy of wisdom, the tangibles of extensive water and rail transportation, economical location sites and a stable and competent labor supply and it is apparent that the Southland's potential of growth and prosperity is unlimited.

Yes . . . the eyes of the nation are on the Southland, viewing with interest and favor its steady, determined progress. Southland Life Insurance Company, motivated by this same forward spirit, is proud of its contributions to this development as part of the great South. It is constantly striving to provide better services for the South . . . and for the Nation.

SOUTHLAND LIFE
INSURANCE COMPANY
"Serving Since 1908"

HOME OFFICE • DALLAS, TEXAS

LIFE • ACCIDENT • HEALTH • HOSPITALIZATION • GROUP

PIPELINES MEAN CONSERVATION

The greatest part of the gas carried to market by El Paso Natural Gas Company is "flare" gas which would necessarily be burned at the field were it not for the pipelines.

The waste gas thus converted to useful purposes each year is equivalent in fuel value to 60,000,000 barrels of oil—a major contribution to the conservation of natural resources.

EL PASO NATURAL GAS COMPANY

Check these Advantages which mean *More Profits* for Industries located in this area

The Fort Worth and West Texas area served by the Texas Electric Service Company

A BIG MARKET: Fort Worth and West Texas are near the center of a nine-state area that contains twenty-five million potential customers—in the heart of a TWENTY BILLION DOLLAR ANNUAL market.

EXCELLENT TRANSPORTATION: Trunk-line railroads, common-carrier truck lines operating over a well-developed highway system and scheduled airlines furnish a complete transportation service to the entire area.

DEPENDABLE LABOR: Dependable labor means less turnover and higher productivity. The labor market of this area is made up mostly of native, easily trained, conscientious workers.

PLENTIFUL LOW-COST POWER AND FUEL: The continued expansion of the interconnected facilities of the Texas Electric Service Company and neighboring electric utility companies assures adequate and dependable electric service at reasonable rates. The tremendous supplies of natural gas available in the area are being supplemented by new discoveries each year.

MILD CLIMATE: The climate of Fort Worth and West Texas is mild and healthful. This makes it a good place to live and to work.

Our Area Development Division can give you the complete story on the area we serve. This information will be factual and unbiased and will be kept confidential if you so desire. For further information, write, wire or phone Fred A. Elliston, Manager, Area Development Division. Telephone ED-1371.

TEXAS ELECTRIC SERVICE COMPANY

GENERAL OFFICE: FORT WORTH, TEXAS

Where there's room to GROW!

By locating your plant in Texas, you can grow with one of the fastest-growing regions in the U. S.

Since 1939, the growth rate of Texas has exceeded the national average in population, industrial employment, value added by manufacture and income per capita.

Texas offers industry the profit opportunities of an expanding market, plus the nation's richest store of raw materials, year-around mild climate, lower production costs, abundant low-cost power and natural gas, and excellent transportation. There is no state income tax in Texas and no sales tax.

The medium and smaller-sized cities on Community Public Service Company lines offer special advantages to industry. Living costs and taxes are generally lower, living conditions are better and there is a plentiful supply of intelligent, home-loving workers who have the incentive and capacity to produce.

Scores of prime locations are available and many communities we serve offer attractive inducements to industry. We'll be glad to furnish full information on request.

WRITE OUR COMMERCIAL DEPARTMENT

for information about plant sites and other data concerning any of the cities and towns listed at right. All inquiries held in strictest confidence.

LIGHT
COMMUNITY PUBLIC SERVICE
POWER

ELECTRIC BUILDING
FORT WORTH, TEXAS

THE PLANT SITE YOU WANT IS HERE

Texas cities and towns served by Community Public Service Company

ALVIN
ANGLETON
AUBREY
BAGWELL
BARSTOW
BELLS
BLOSSOM
BLUE RIDGE
BLUFFDALE
BLUM
BOGATA
BOOKER
BRAZORIA
BRECKENRIDGE
BRYSON
BYERS
CELESTE
CLIFTON
COVINGTON
CRAWFORD
DARROUZETT
DEPORT
DETROIT
DICKINSON
ELIASVILLE
EMORY
FOLLETT
FORT STOCKTON
FULBRIGHT
GATESVILLE
GLEN ROSE
GORDON
GRAHAM
GUSTINE
HAMILTON
HICO
HIGGINS
IREDELL
JEAN
JERMYN
KERMIT
LA MARQUE
LEAGUE CITY
LEONARD
LEWISVILLE
LONE OAK
LOVING
MEGARGEL
MERIDIAN
MEMPHIS
MINGUS
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NEWCASTLE
NOCONA
OLNEY
PECOS
PERRYTON
PETROLIA
PILOT POINT
POINT
PRINCETON
RANGER
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WEST COLUMBIA
WHITEWRIGHT
WHITNEY
WICKETT
WOODSON
and other communities

To Renew the Spirit Which Built Our Country

...Faith in Ourselves

Since the beginning long, long ago at Valley Forge and on Bunker Hill, Americans have had reason to be proud of their country — and themselves.

From the valleys, the mountains, the plains — from all the States of the Union — they have come to stand wherever blood wrote our history!

And not in war only: But in peace and in the good, clean work of the farm and factory, we have given of ourselves that our nation might prosper.

Americans have cause to be proud — to have faith in themselves.

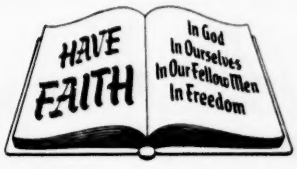
Sometimes these days, it seems, some of us forget the proud company we have joined . . . forget the brave names on monuments where bronze blackens with weather . . . forget the great deeds graven in granite.

Haven't we cause to have faith?

Haven't we the duty to have faith in ourselves — *and to let the world know it?*

Each of us can help revive the spirit which built our country — by placing Faith in God . . . in Ourselves . . . in Our Fellow Men . . . and in Freedom.

Each of us can help revive the spirit which built our country by keeping these Four Great Faiths and by proclaiming them to the world — not always in words, but surely always in deeds.



Write today for a copy of the article, "Our Four Great Faiths", and for reprints of this advertisement. Mail request to: J. B. Shores, Director, Employe-Public Relations, Texas and Pacific Railway, Dallas, Texas. No charge, of course.

GO T&P **TEXAS AND PACIFIC RAILWAY**

WELCOME TO WEST TEXAS—

You, too, can be a

"Partner in Progress"

Friendly people and friendly towns invite you to become *a partner in the phenomenal progress* of West Texas where vast natural resources and a highly diversified agricultural program offer unusual attractions for business and industry.

"There's plenty of Power in West Texas"

The West Texas Utilities Company, serving 168 West Texas towns and communities, is a *pioneer partner* in the development of this western empire. Our Industrial Department will be glad to supply detailed information concerning the economic advantages of West Texas.

West Texas Utilities Company

General Office, Abilene, Texas

WE HAD *YOU* IN MIND

Accident PREVENTION *Pays*

Here's something of real value to every Employer of labor in Texas... the EMPLOYERS' HANDBOOK. It has been prepared specifically to explain in clear terms the Texas Workmen's Compensation Act, and the Employers' responsibilities in complying with the Act. The following informative subjects are covered:

- **What you need to know about the Act**
- **What the Act requires of you as an Employer**
- **Scope of the Act**
- **Medical and Hospitalization benefits due injured employees**
- **Money benefits due injured employees**
- **Benefits due in fatalities**
- **Administration of the Act**

We feel certain you will find this 28-page illustrated booklet very helpful. Simply request the nearest Texas Employers' office today to furnish you with your free copy of the EMPLOYERS' HANDBOOK.

Largest Writer of WORKMEN'S COMPENSATION INSURANCE *in Texas*

HOMER R. MITCHELL, *Chairman of the Board* A. F. ALLEN, *President*

Service Offices: ABILENE • AMARILLO • AUSTIN • BEAUMONT • CORPUS CHRISTI • DALLAS • EL PASO FORT WORTH • FREEPORT • GALVESTON • HARLINGEN • HOUSTON • LUBBOCK • MIDLAND ODESSA • PORT ARTHUR • SAN ANGELO • SAN ANTONIO • SHERMAN • TYLER • WACO • WICHITA FALLS

TEXAS EMPLOYERS INSURANCE ASSOCIATION
HOME OFFICE - DALLAS, TEXAS

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You, too, can be a

"Partner in Progress"

Friendly people and friendly towns invite you to become *a partner in the phenomenal progress* of West Texas where vast natural resources and a highly diversified agricultural program offer unusual attractions for business and industry.

"There's plenty of Power in West Texas"

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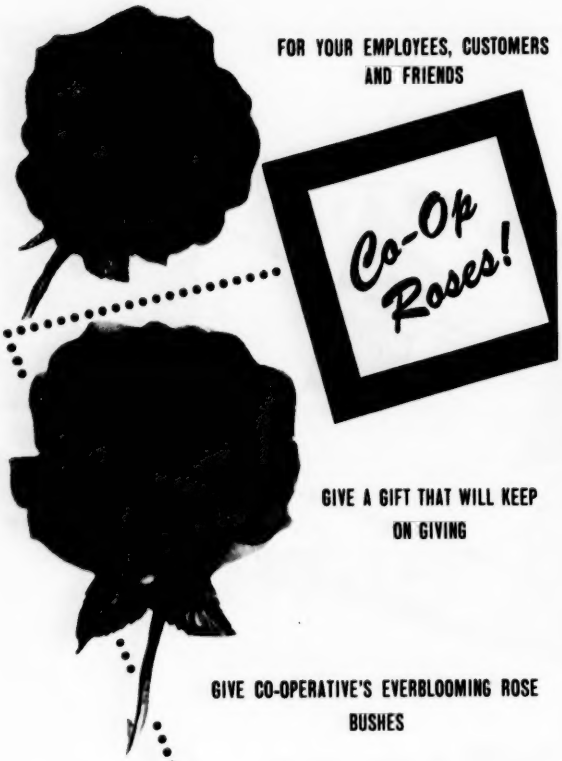
TEXAS EMPLOYERS INSURANCE ASSOCIATION
HOME OFFICE · DALLAS, TEXAS


FOR YOUR EMPLOYEES, CUSTOMERS AND FRIENDS
Co-Op Roses!
GIVE A GIFT THAT WILL KEEP ON GIVING
GIVE CO-OPERATIVE'S EVERBLOOMING ROSE BUSHES

Yes, here is perfect taste combined with unusual thoughtfulness. Your "Merry Christmas" is warmly received and long remembered when you give Co-Operative's Everblooming Rose Bushes.

And it's so easy! The 1953 Christmas Rose package contains the *three*, all-time, award winning patented roses. You will give one of the famous PEACE roses with its varying shades of yellow and pink, one large MIRANDY and one CHRYSLER IMPERIAL.

Peace is the world's leading award winner having won top awards in England, France and America. Mirandy is the beloved all time favorite, known for its upright bushiness and its brilliant garnet-red blooms. The Chrysler Imperial is 1953's headliner and winner of the All America Rose Selection. It's noted for its crimson flowers with a darker overtone and long tapering buds.

All three rose bushes, packaged with complete planting instructions and mailed direct from our fields to your Christmas List for $6.50 postpaid.

In addition, we will notify each person that you are sending this lasting gift and then we will hold shipment for them until the correct planting time.

Order today. Just send your list and we will bill you - - - Leon Miller

Co-Operative Rose Growers
P. O. Box 808M, Tyler, Texas
Attention: Leon Miller, Manager
Please send the attached list your 1953 Christmas Rose Package for ..... each and bill me later.
Name .....
Address .....
City .....
State .....

LITTLE GRAINS OF SAND

"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."

Sauce for the Gander. When the Federal Government hands out money to states or local communities there are always conditions attached. While we do not want Federal regulation at the state or local level, we can easily understand why the Federal Government should have something to say as to how this money should be spent.

Since this is the case, why doesn't the Government attach similar rules to foreign grants and "loans"?

Foreign grants under the various gimmick plans, the Marshall Plan, the EDC, NATO, MSA, etc. are handed out with the questionable explanation that if we allow our allies to become bankrupt they will embrace communism. This totally unproved idea has been promoted to such an extent that many otherwise intelligent men still believe it.

Isn't it about time that we, as a nation, learned that we can not buy friendship and security from other nations?

Aid and Competition. As industrial recovery gains momentum abroad, American business is being subjected to more effective competition from foreign sources both abroad and in the home market. This is causing a growing undercurrent of criticism in this country of foreign aid programs which result in further strengthening the ability of other countries to compete with American producers.

These critical views of foreign aid and investment that fosters competition with American business focus attention on the basic conflict in foreign economic policy. On the one hand our policies abroad are designed to strengthen the economies of friendly countries by helping them to expand production and exports so that they will gradually become better customers of ours. On the other hand, traditional protectionist thinking bobs up again when foreign sellers make inroads into either our domestic markets or markets abroad hitherto served by American business.

Past experience has demonstrated that while individual concerns may be affected adversely by growing industrialization abroad, in time our economy as a whole benefits. Canada provides a good example. American capital and enterprise has furnished a considerable part of the resources and planning that have made possible Canada's rapid and successful industrialization. Canadian enterprises offer American business stiff competition in a number of fields. Yet Canada has become so rich a market for American products that our economy, as a whole, has unquestionably benefited greatly from the prosperity of our northern neighbor.

Impractical. Because they realize that steady employment helps to maintain and improve labor skills

(*Continued on page* 42)

You **Brown & Root** fellers sure make the fur fly!

Farmers and Board Chairmen, too, are amazed at the rapid progress of Brown & Root projects. But, to Brown & Root, fast—economical completion is good business . . . it's why successful clients have continued to award repeat contracts to our company.

Brown & Root is an entirety, unique in its field . . . in that we can do all of our work, from process engineering through construction.

We take pride in our projects and a real delight in probing for better methods in engineering and construction.

These facts, plus almost 40 years experience in heavy construction and engineering, can be of immeasurable benefit to you.

If your company contemplates new construction or expansion . . . a call will put Brown & Root experts at your disposal . . . no obligation, of course.

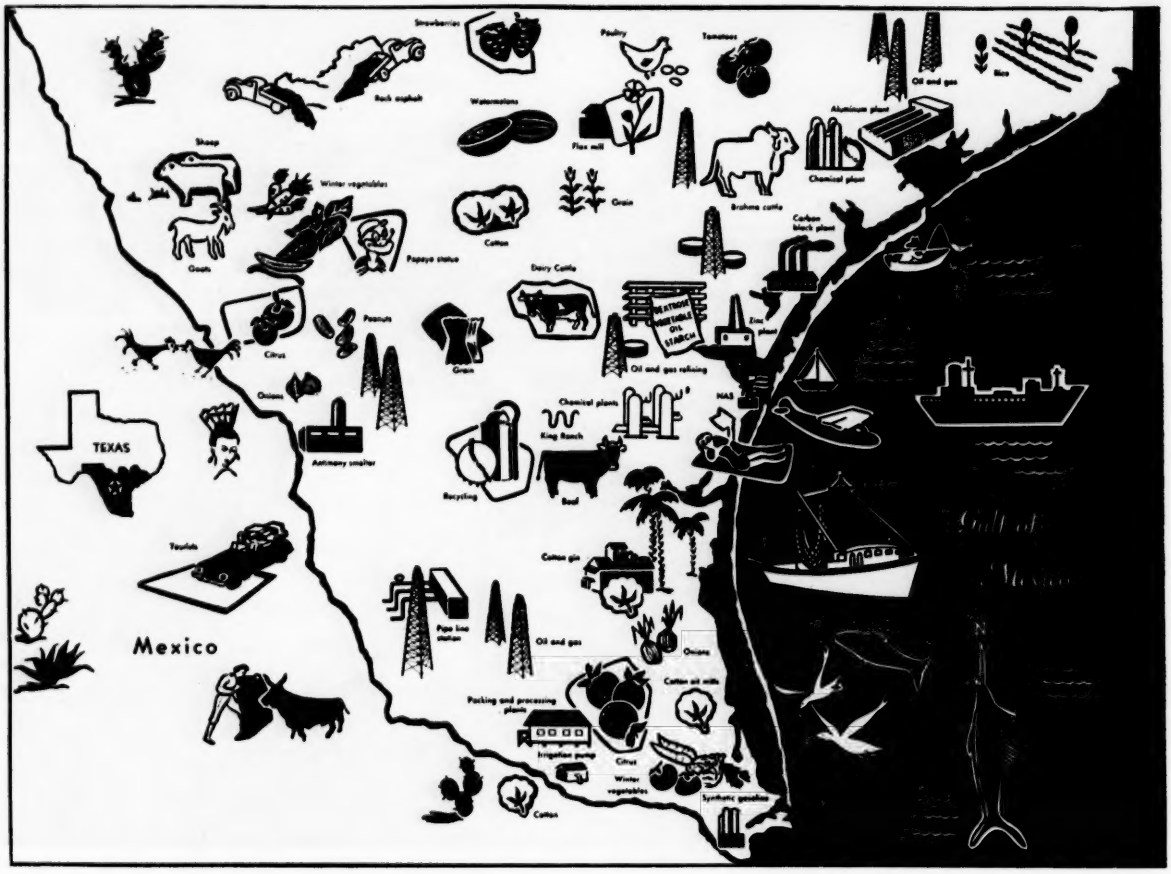
BROWN-BILT

BROWN & ROOT, Inc. *Engineers • Constructors*

P. O. BOX 3, HOUSTON 1, TEXAS

CABLE ADDRESS — BROWNBILT

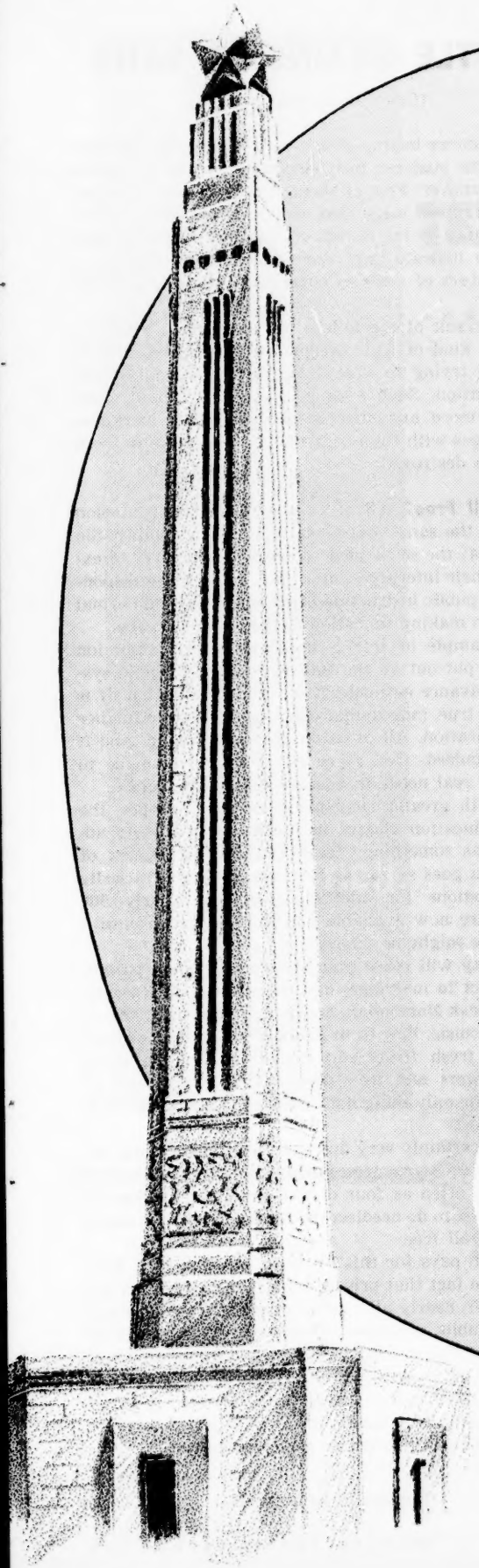
Associate Companies:— BROWN ENGINEERING CORP. • BROWN & ROOT MARINE OPERATORS INC.



THIS IS NO TEXAS BRAG!

It's a picture of facts. The pictorial map shows some of the principal resources and industries in the bountiful South Texas area served by Central Power and Light Company. For further information about this rich and growing area, contact our Industrial Development Department. All inquiries will be treated in strictest confidence. Write, wire or telephone R. L. Dunten, Director of Industrial Development, Corpus Christi, Texas.

CENTRAL POWER AND LIGHT COMPANY



Limestone

◗ Marks the Battle ◗ of San Jacinto

Texans like to brag — and they like tall tales. But it's no tall tale when they say that the limestone for the tallest monument in the world was supplied by the largest limestone quarry in Texas.

TEXAS QUARRIES limestone goes to town to make commercial buildings that appeal to the eye. Smart business men know that first impressions are important in attracting customers — for that reason limestone is rapidly becoming the building stone of business and industry.

Texas Quarries limestone is used in homes, schools and churches too — combining beauty, dignity and utility to bring lasting satisfaction.

Whatever you build — whenever you build, remember TEXAS QUARRIES limestone for durability, economy, comfort and appearance.

CORDOVA SHELL CUT STONE

CORDOVA CREAM SPLIT FACE

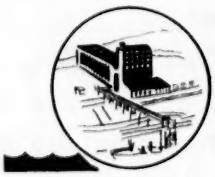
TEXAS QUARRIES INC.

AUSTIN, TEXAS

PORT OF HOUSTON

doorway to the world

TERMINAL FACILITIES: Wharves and docks at the Port of Houston are among the newest and most modern in the nation—geared for fast, economical movement of all types of cargo.



PUBLIC GRAIN ELEVATOR: The Port of Houston's 3,500,000 bushel Public Grain Elevator offers grain shippers one of the most modern grain facilities on the Gulf Coast.

MECHANIZED HANDLING: Shippers who specify "Via Port of Houston" save time and money because of the mechanical handling equipment used at this modern port.

FOREIGN TRADE SERVICES: All necessary foreign trade services are available to shippers using the Port of Houston.

the
Port of Houston

Harris County Houston Ship Channel Navigation District
P. O. BOX 2562 HOUSTON • TEXAS
Regional Offices
Board of Trade Bldg. Kansas City, Mo. Room 2581 Whitehall Bldg. New York City

LITTLE GRAINS OF SAND

(*Continued from page* 38)

and consumer buying power, as well as reduce production costs business men constantly strive to reduce labor turnover. Few of them, however, have accepted the guaranteed wage idea as a feasible means to this end. Studies by the Bureau of Labor Statistics in 1952 failed to indicate any recent appreciable increase in the numbers of workers covered by guaranteed wage plans.

As a result of the failure of "guaranteed wage" to win any kind of wide acceptance some union leaders are now trying to link it with state unemployment compensation. Such a tie-in presumably could make benefits more attractive to the individual workman than wages with the result that the incentive to work would be destroyed.

It's All Free? All of us are for public education and—by the same token—most of us are against Sin but just as the self-styled "censors" often carry to extremes their interpretation of Sin, so do those responsible for public instruction often go far beyond normal bounds in making education available to everyone.

An example of this is noted from the promotion material put out by the Baltimore Public School system to advance enthusiasm for Adult Education. It is certainly true, indeed, that many adults need to further their education. All of us do, for that matter. And it is true, indeed, that every effort should be made to meet the real needs in education of the populace.

But with greater emphasis than seems proper, the Adult Education classes in Baltimore are being advertised as something "free" and the Department of Education goes so far as to urge the public to write in suggestions for additional courses. Nearly 300 courses are now available and it is hard to conceive that more might be offered.

The City will teach you how to be a good parent, how to act in marriage, how to converse in Russian, how to speak Norwegian, how to appreciate art, how to listen to music, how to fit and sell shoes, how to merchandise fresh fruits and vegetables, how to study birds, flowers and trees and how to service an oil burner. The only thing not listed was a course in "how to breathe."

This is certainly very fine and there undoubtedly are thousands each year who faithfully travel to one of 35 schools as often as four or five times weekly just to find out how to do needlecraft. After all, why shouldn't they? It's all free.

But who pays for this? You do, Mr. and Mrs. Taxpayer. The fact that private schools of instruction are available in nearly all courses offered "free" does not impress public educators. They want everyone to be full of schooling and full of credits and full of diplomas —all free. It's grand to be an American and have access to all this free knowledge. However, it is not quite so fine to be a taxpayer and have to support this sort of program to such an elaborate extent.

Maryland Report

(*Continued on page* 46)

OIL

•

GAS

•

POWER

•

WATER

•

LABOR

•

RAW MATERIALS

•

TRANSPORTATION

•

PLENTY OF PLANT SITES

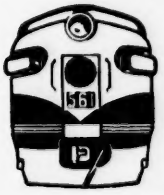
TEXAS HAS WHAT IT TAKES

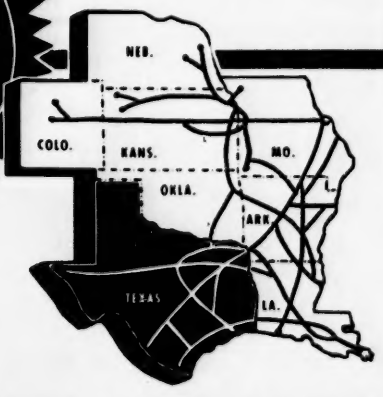
...to make your plant prosper!

MISSOURI PACIFIC'S Industrial Development Department can provide you with complete information about industrial opportunities in Texas and will assist you in selecting the *right* location. Your inquiry will be kept in strict confidence.

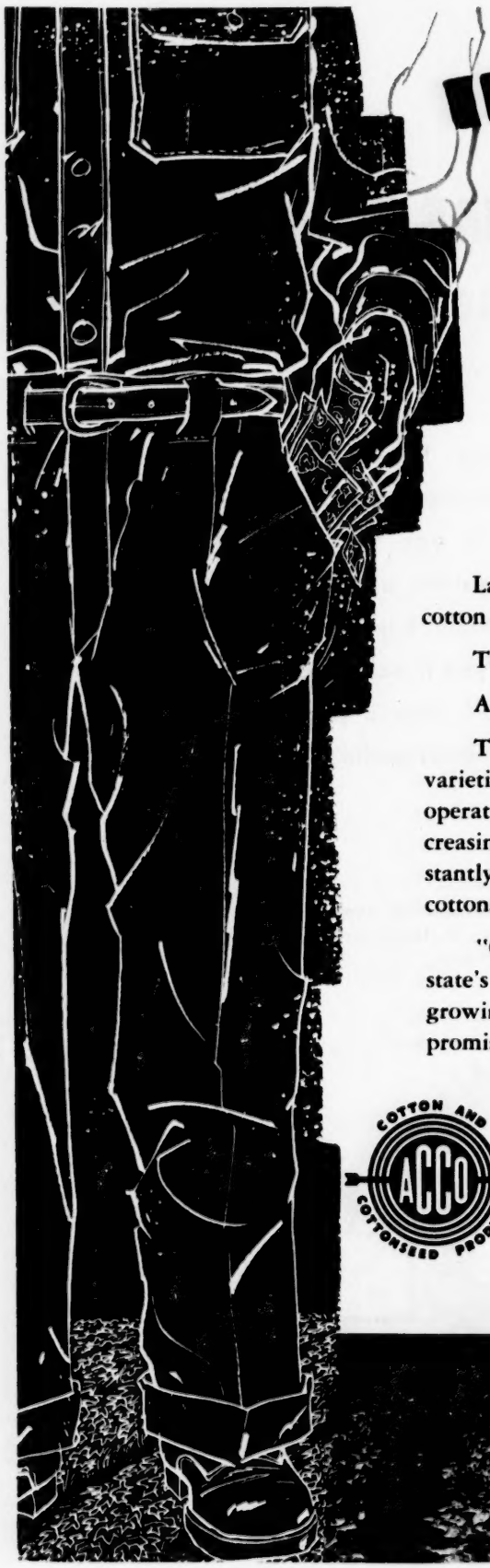
C. LUCKEL
Director of Industrial Development
Missouri Pacific Lines, Union Station
Houston 1, Texas

MISSOURI PACIFIC LINES





SERVING THE WEST-SOUTHWEST EMPIRE



That's "COTTON CASH" IN HIS POCKET

Last year the value of Texas' No. 1 cash crop — cotton and cottonseed — was a whopping $831,065,000.

That's big, even for Texas.

And the prospects are bright for cotton's future.

Thanks to scientific breeding, improved cotton varieties are being developed year by year. Mechanized operations and better insect control are steadily increasing acre yields. Research and technology are constantly opening new horizons for the use of cotton and cottonseed products.

"Cotton cash" has been the basis of much of the state's wealth. With the help of modern methods in growing, ginning, processing, and marketing, cotton promises to *remain* "King" in Texas.

COTTON AND ACCO COTTONSEED PRODUCTS

ANDERSON, CLAYTON & CO.

(INCORPORATED)

HOUSTON • ATLANTA • MEMPHIS • BOSTON
LOS ANGELES • NEW ORLEANS • NEW YORK

TEXAS STEEL PRODUCTS

TEXLOY FENCE POSTS

ASK YOUR JOBBER FOR TEXLOY POSTS

- Rust Resistant
- TEXLOY Studded Tee Fence Posts
- Baked on Aluminum Enamel Finish
- Hi-Strength Copper Bearing Electric Furnace Steel

Specify TEXAS HI-BOND

RAIL STEEL

REINFORCING BARS

Carbon & Alloy STEEL BARS

Special Carbon & Alloy Steel Bars in reasonably small mill quantities. We serve this field to fill the limited needs of operators in the Southwest.

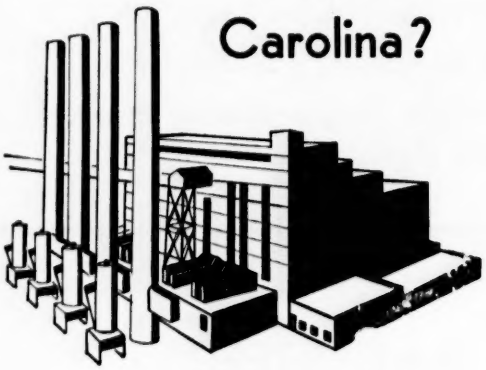
STEEL CASTINGS

Manufacturers of High Quality
CARBON AND ALLOY
ELECTRIC STEEL CASTINGS

TEXAS STEEL COMPANY

3901 HEMPHILL STREET **FORT WORTH** **PHONE WE-4611**

what's NEW in South Carolina?



URQUHART STATION producing more firm, dependable power as its first two units go into operation

Keeping ahead of the demand for electric power has always been an established policy of SCE&G. Our newest and biggest power producer, Urquhart Station is a direct result of SCE&G's planning ahead and building ahead.

At a cost of about $50,000,000, Urquhart will have an ultimate capability of more than 350,000 KW. This power is available anywhere in the 23 counties served by SCE&G's vast transmission network. This is the power upon which South Carolina's progress depends.

SOUTH CAROLINA ELECTRIC & GAS CO.

LITTLE GRAINS OF SAND

(*Continued from page* 42)

Foreigners at the Trough. Sen. Harry Byrd reported that civilian employment in August was reduced by 24,302 leaving a total of 2,430,412, his Committee also disclosed that approximately 7,000 "foreign nationals" employed in three agencies abroad were being reported for the first time. It is estimated that 200,000 or more "foreign nationals" working for U. S. agencies overseas are not included in employment reports available at this time.

These employees have not been reported in the past because they were not paid from regularly appropriated funds. Up to last July they were paid from foreign currencies and credits collected by the agencies which made free use of these funds in addition to their regular appropriations. Collections of such funds for Fiscal 1954 are estimated at nearly $1 billion. But under new legislation now in effect, better controls over this type of spending by overseas agencies have been established.

They've Got to be Sold. According to experts like Arthur H. Motley, President of Parade Publication, Inc., there are plenty of goods to be sold and consumers have plenty of money to become purchasers. But they must be persuaded to buy. Mr. Motley once summed up his thinking in this way: "We don't need government spending or government controls or government restrictions for better living. We need competition in products, in price, and in persuasion. We need to understand what most of the rest of the free world still rejects: That more money must be spent on distribution, not less.

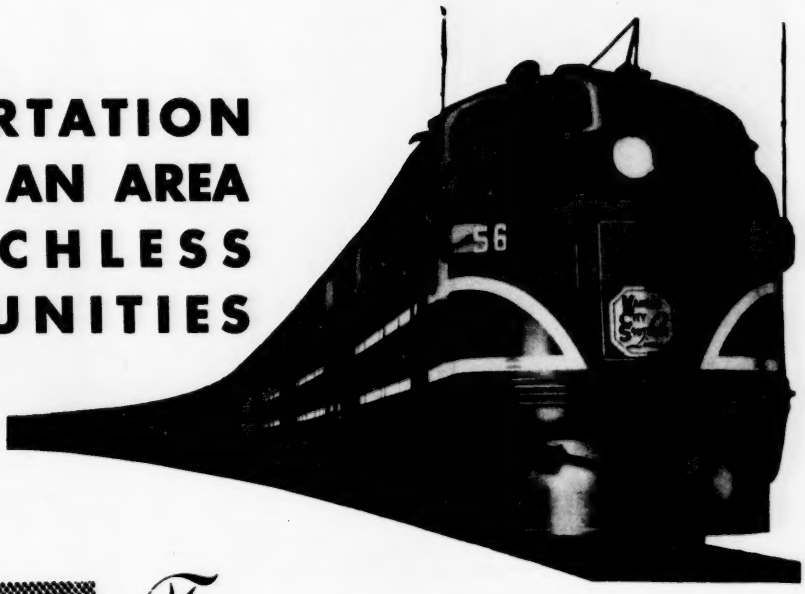
"We must increase the productivity of distribution and we can do that in the same way we increased the productivity of our farms and factories—by 'mechanization.' We are producing more food and more goods with fewer people, but to do it we have spent more money in time and research, in horsepower, machines and other forms of invested capital. That same approach must be used if we are to improve distribution, and only through improved distribution will we be able to continue the kind of an economy that will give us better living. It is an economy built upon a high velocity of business transactions."

8 of them Southern. When Gov. Gordon Persons of Alamaba signed the bill outlawing the union shop and similar labor-management agreements on August 28, Alabama became the 14th state with a right-to-work law.

The bill makes it unlawful to require an employee to join a labor organization in order to hold his job. It also prohibits the mandatory check-off of union dues. Thus it would outlaw the union shop, maintenance of membership or any similar contract provisions requiring union membership as a condition of employment.

Other states having right-to-work laws are: North Carolina, Virginia, Nebraska, Georgia, Arizona, Arkansas, Florida, Nevada, Iowa, Texas, North Dakota, Tennessee and South Dakota.

TRANSPORTATION TO MATCH AN AREA OF MATCHLESS OPPORTUNITIES



Tremendous resources of wide diversity have resulted in phenomenal industrial growth along Kansas City Southern Lines within the past decade.

And Kansas City Southern Lines service has been tailored to the needs of this up-and-coming area—fast diesel freights with an enviable on-time record... finer passenger trains, including the Southern Belle streamliners...all on faster schedules between Kansas City and five great Gulf ports—New Orleans, Baton Rouge, Port Arthur, Beaumont and Lake Charles.

There's new business to be had... fabulous resources awaiting development... ideal homesites in the Ozarks and Ouachitas... attractive, yet economical, vacation spots—increasing opportunities for all along Kansas City Southern Lines.

Write
D. T. McMAHON
Assistant to President
KANSAS CITY SOUTHERN LINES
Kansas City 6, Mo.
for information on
resources and manufacturing

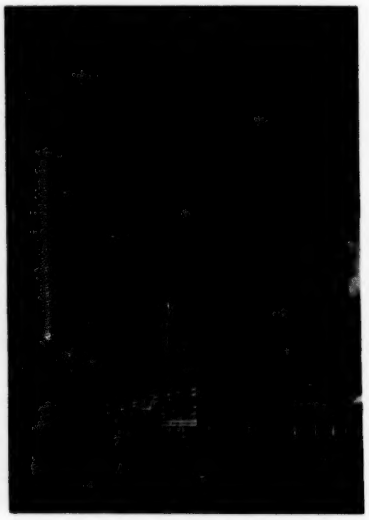
KANSAS CITY SOUTHERN Lines

ROUTE OF THE

Southern Belle

Lv. KANSAS CITY 4 PM • Ar. NEW ORLEANS 10:15 AM

Same Schedule Northbound



RICE HOTEL, HOUSTON
HOME OF THE BEAUTIFUL
NEW PETROLEUM CLUB

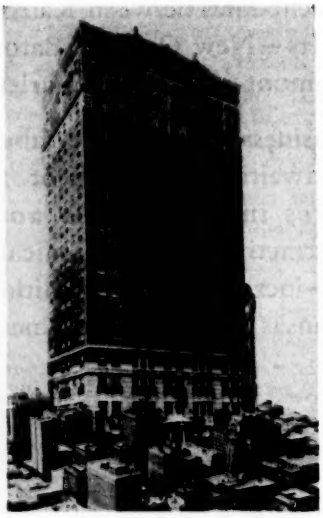
LAMAR HOTEL, HOUSTON
IN THE CENTER OF HOUSTON'S
SHOPPING DISTRICT

4 OUTSTANDING HOTELS

that offer Texas Hospitality!

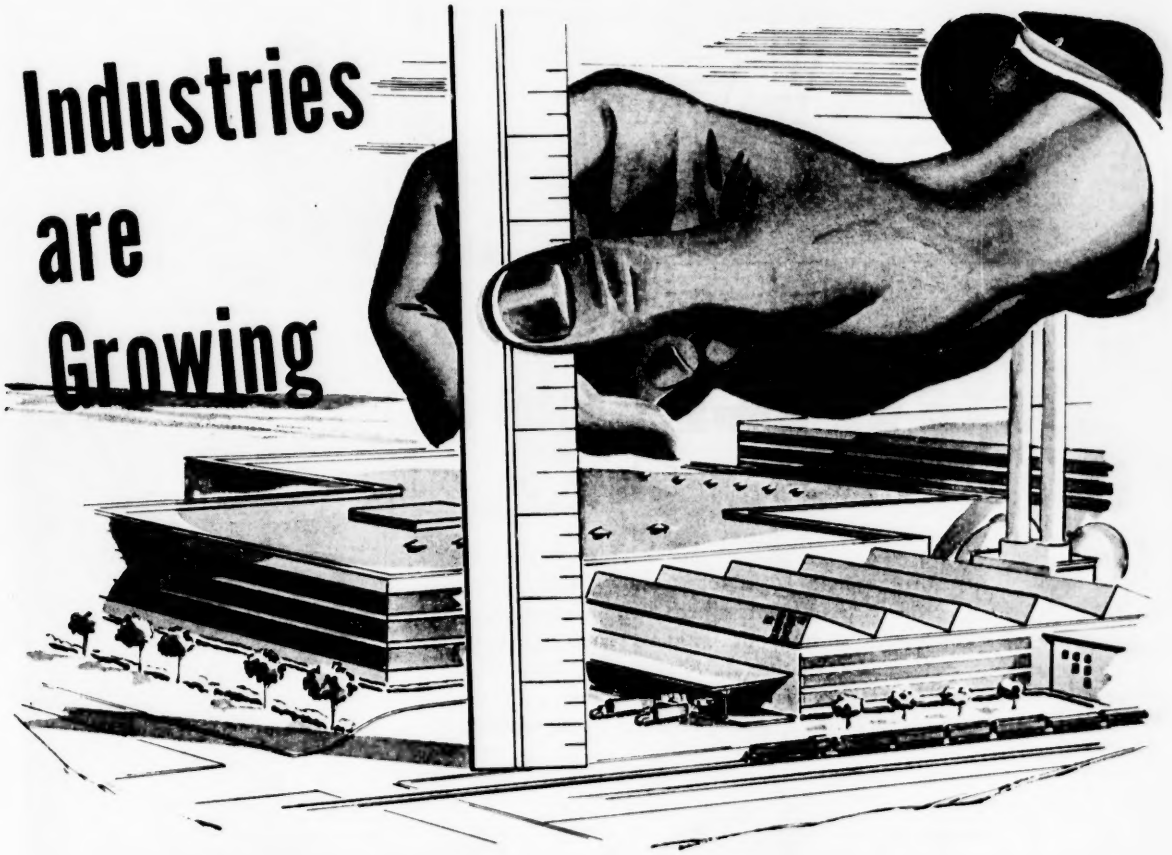
JESSE H. JONES INTERESTS

Houston, Texas



WORTH HOTEL
FORT WORTH, TEXAS

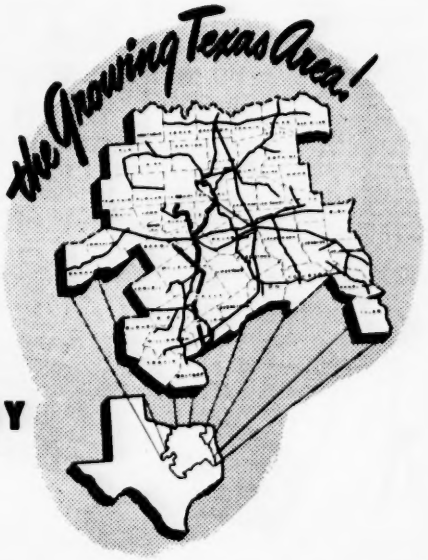
TEXAS STATE HOTEL
HOUSTON, TEXAS



in North, East and Central Texas!

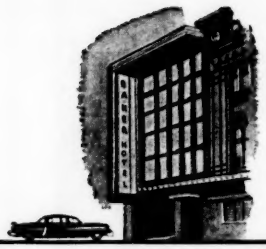
Small wonder! This "Texas Bright Spot" — the area served by Texas Power & Light Company — offers many advantages to industry. You will find low-cost plant sites which allow plenty of room to grow . . . in the heart of a 24-billion-dollar per year market . . . a growing market that has shown an increase of almost 300 per cent in the past 10 years! It is an area which abounds with such advantages as raw materials, ample low-cost power and fuel, low tax structure, mild climate, intelligent native labor, excellent transportation facilities, and a fine spirit of cooperation from city, county and state officials.

You are invited to use the services of our Industrial Development Department. We shall gladly furnish you with specific data you may need on this growing area. Write or wire the Industrial Development Department, Texas Power & Light Company, Dallas, Texas.



TEXAS POWER & LIGHT COMPANY

A Famous Host in a Fabulous City



CONVENIENT MOTOR LOBBY

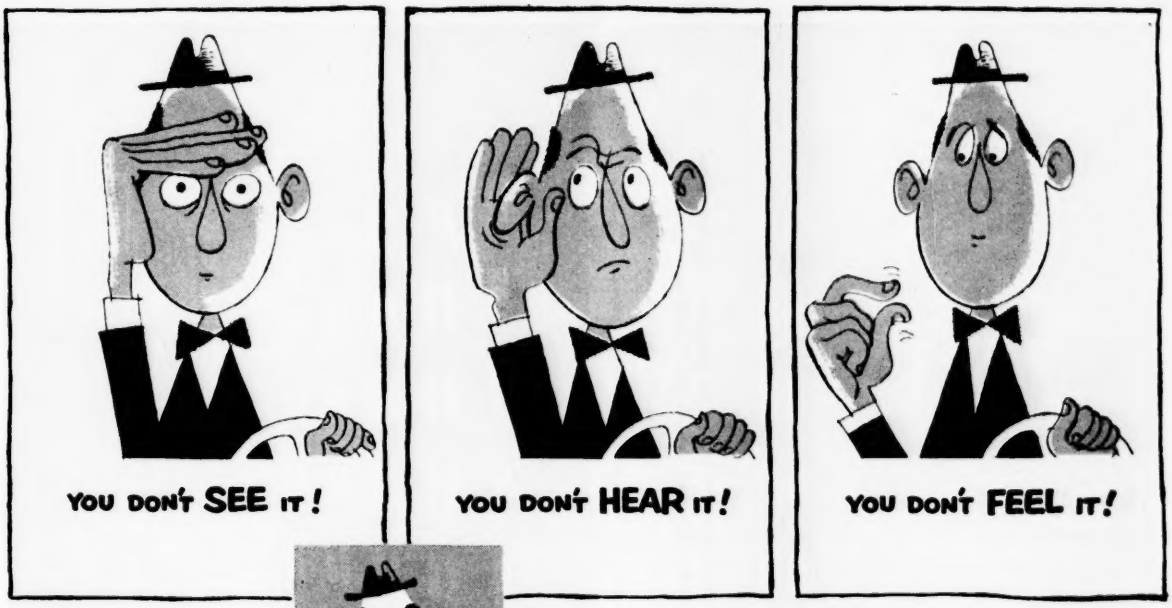
the BAKER hotel
DALLAS, TEXAS

Favorite host in Texas' most cosmopolitan city, Hotel BAKER offers superb accommodations. Air conditioned throughout . . . guest rooms equipped with radio and television . . . convenient drive-in motor lobby with elevator direct to room . . . central location . . . efficient and courteous service.

Home of the famous MURAL ROOM . . . featuring stars of Stage, Screen, and Radio. Nationally known orchestras playing nightly.

AFFILIATED NATIONAL HOTELS

ALABAMA	
HOTEL ADMIRAL SEMMES	Mobile
HOTEL THOMAS JEFFERSON	Birmingham
DISTRICT OF COLUMBIA	
HOTEL WASHINGTON	Washington
INDIANA	
HOTEL CLAYPOOL	Indianapolis
LOUISIANA	
JUNG HOTEL	New Orleans
HOTEL DESOTO	New Orleans
NEBRASKA	
HOTEL PAXTON	Omaha
NEW MEXICO	
HOTEL CLOVIS	Clovis
SOUTH CAROLINA	
HOTEL WADE HAMPTON	Columbia
TEXAS	
HOTEL STEPHEN F. AUSTIN	Austin
HOTEL EDSON	Beaumont
HOTEL BROWNWOOD	Brownwood
HOTEL BAKER	Dallas
HOTEL TRAVIS	Dallas
HOTEL CORTEZ	El Paso
HOTEL BUCCANEER	Galveston
HOTEL GALVEZ	Galveston
HOTEL JEAN LAFITTE	Galveston
CORONADO COURTS	Galveston
MIRAMAR COURT	Galveston
HOTEL PLAZA	Laredo
HOTEL LUBBOCK	Lubbock
HOTEL FALLS	Marlin
HOTEL CACTUS	San Angelo
HOTEL MENGER	San Antonio
ANGELES COURTS	San Antonio
VIRGINIA	
HOTEL MOUNTAIN LAKE	Mountain Lake
HOTEL MONTICELLO	Norfolk



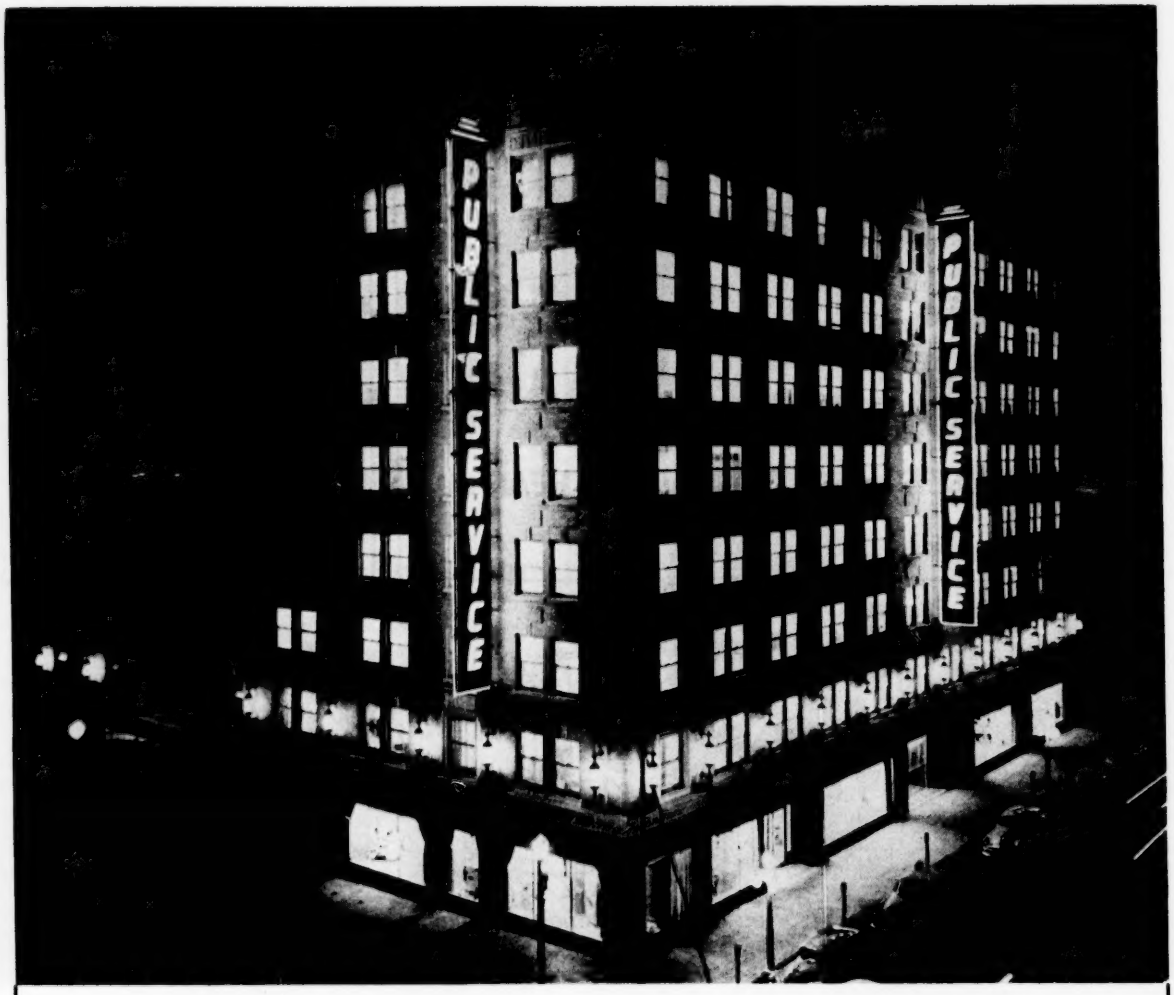
..but you can be sure of it!

Yes, you can be sure that your car is getting the finest protection money can buy. When you fill your car's crankcase with Gulfpride H.D. you can drive anywhere with assurance that things are right with your engine, lubrication-wise. You know that this fine oil is keeping your engine clean, guarding against wear, protecting vital parts from rust and corrosion—actually prolonging its life by giving it the best all around protection known to modern science. Gulf's vast research facilities are dedicated toward keeping Gulfpride "out front," well ahead of the increasingly exacting demands of advancing engine design. So—even though it "works in the dark" and you don't *see* it, *hear* it, or *feel* it, you can rest assured that Gulfpride H.D. is doing its job efficiently and well.

ASK FOR **Gulfpride H.D.** HIGH DETERGENCY

THE WORLD'S FINEST MOTOR OIL

AT YOUR GOOD GULF DEALER'S

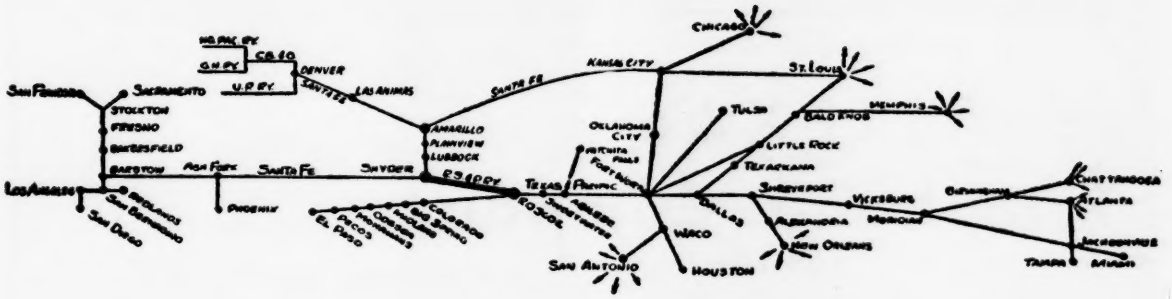


THE SIGN OF SERVICE

"Public Service" is the sign of dependable electric service for nearly 160,000 customers in the 45,000 square mile area of the South Plains and Texas Panhandle, Oklahoma Panhandle and the Pecos Valley and Clovis-Portales areas of New Mexico.

Whatever your power needs, industrial, commercial and residential, you'll find they'll be met where you see the sign of dependable electric service — the sign of "Public Service."

SOUTHWESTERN **PUBLIC SERVICE** COMPANY



Roscoe, Snyder and Pacific Railway Company

The Road of Personal Service

A Fast and Dependable Route between California and the Northeast, South, Southeast and East, as well as to defined territories in Texas.

Tied into T. and P. main line to El Paso at Roscoe and Santa Fe coast-to-coast line at Snyder.

When the RS and P was built into Snyder in 1908, the Santa Fe was not operating South of Plainview. This road has had a large part in the development of industry and agriculture in the rich West Texas area it serves and offers its fullest cooperation to new manufacturing plants that locate in the friendly communities along its line.

For information regarding rates, routes, availability of plant sites, labor, power, water, taxes, etc. write, telephone or call in person. We offer you every assistance at our command.

Roscoe, Snyder and Pacific Railway Company

Don Wooten, President and General Manager

Abilene, Texas

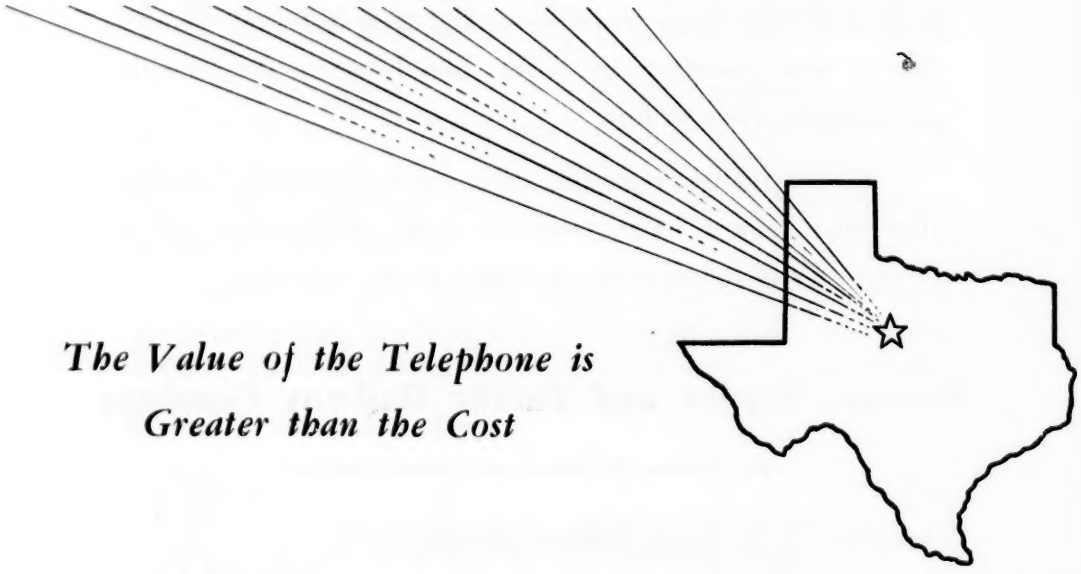
TEXAS
Telephone Company

General Offices

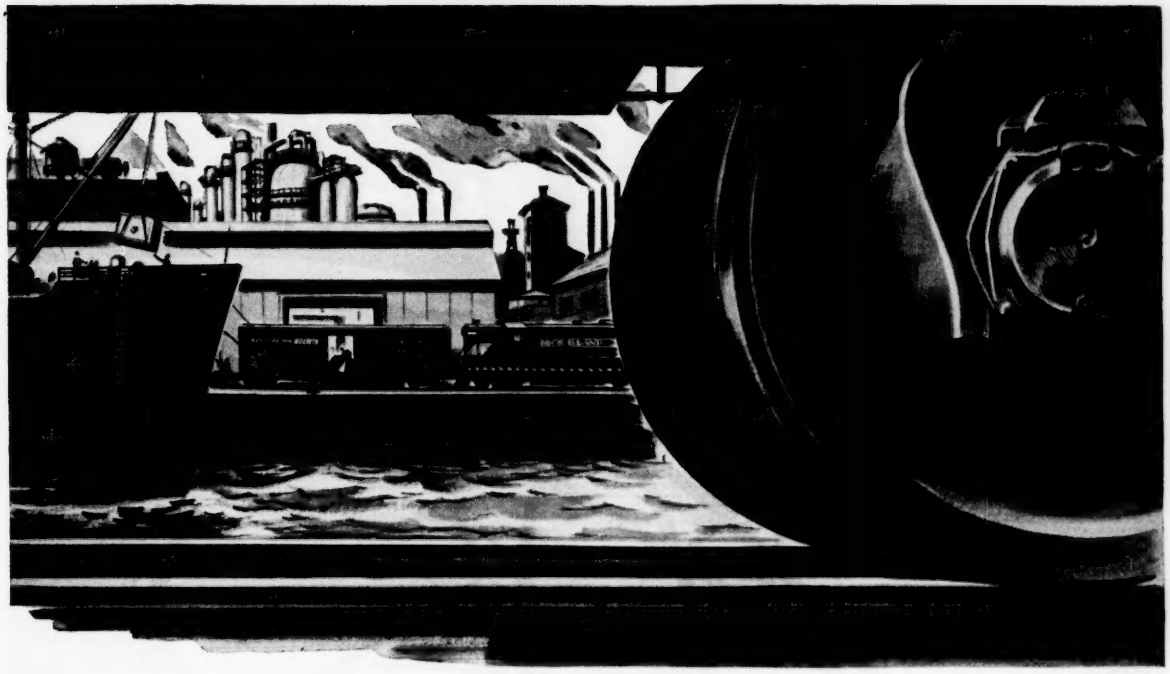
Sherman, Texas

Exchanges:

Aransas Pass
Bailey
Bonham
Collinsville
Comanche
Denton
Ector
Garland
Gustine
Howe
Ingleside
Mt. Calm
Pilot Point
Plano
Sherman
Tioga
Van Alstyne
Whitesboro
Wylie

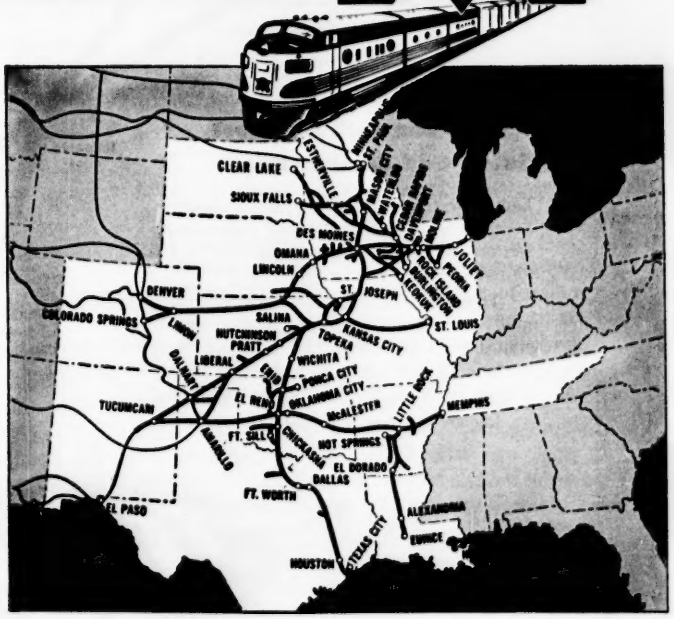


The Value of the Telephone is Greater than the Cost



An Essential Link in World Commerce

Rock Island



● At the gulf ports of Houston, Texas City and Galveston, Rock Island trains deliver shipments of American goods directly to steamships destined for overseas, and, conversely, receive cargoes from foreign lands for American use.

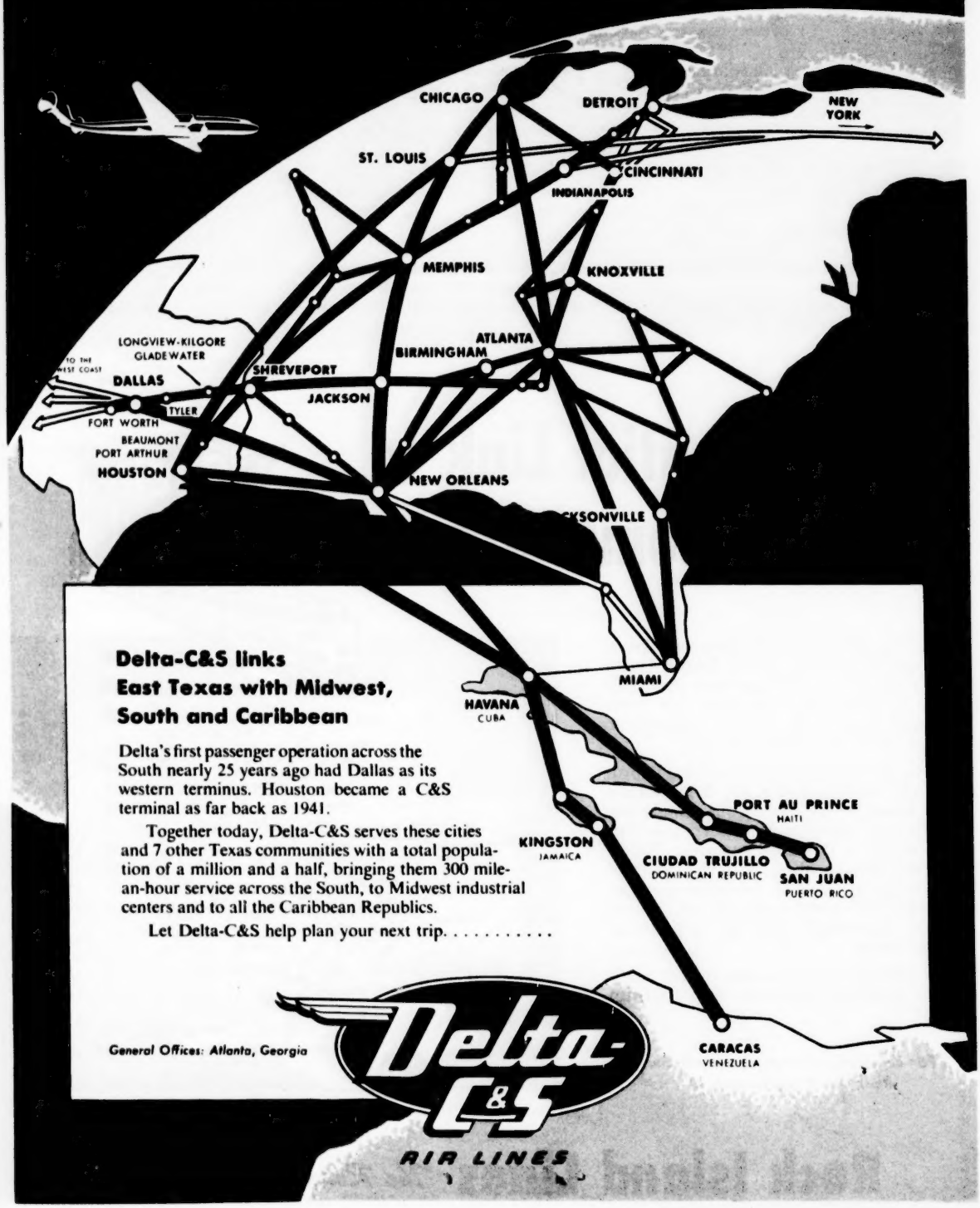
Thus, in addition to the service it provides the American shipper, Rock Island is an essential link in world commerce. Its efficient handling of exports and imports serves a threefold purpose: Facilitates the movement of goods to and from foreign lands; benefits American producers and distributors; promotes an *entente cordiale* that might well mean increased foreign trade.

Are you taking advantage of this Rock Island train-to-ship and ship-to-train service?

For complete information consult any Rock Island representative

Rock Island Lines *The Road of Planned Progress*

TEXAS—anchor state for the New Delta-C&S system



Delta-C&S links East Texas with Midwest, South and Caribbean

Delta's first passenger operation across the South nearly 25 years ago had Dallas as its western terminus. Houston became a C&S terminal as far back as 1941.

Together today, Delta-C&S serves these cities and 7 other Texas communities with a total population of a million and a half, bringing them 300 mile-an-hour service across the South, to Midwest industrial centers and to all the Caribbean Republics.

Let Delta-C&S help plan your next trip. . . . . .

General Offices: Atlanta, Georgia

Delta-C&S AIR LINES

"What Enriches the South Enriches the Nation"

Special Privilege

The vote which elected General Eisenhower President a year ago was not only a vote for a sincere and able man who had captured the popular fancy, it was very much a vote against corruption in government, communist coddling, waste, inefficiency and the deliberate splitting of our citizenry into pressure groups for political purposes.

Much has been done, and more is being done, to root out corruption and to expose communism for what it is and to eliminate communists wherever they may be. The problem of terrific waste and unbelievable inefficiency in the management of federal functions is being attacked vigorously. Thus far progress has been slow because the problem is so big and Mr. Eisenhower, unlike his immediate predecessors, is an honorable man who has been trained to avoid making mistakes.

But among the sinister elements of New Dealism and Trumanism there was the all too successful effort for centralized power which could be used to reward special groups for their political support. It was centralized power, used to perpetuate itself, which Mr. Eisenhower condemned so effectively and successfully during his campaign.

Recently, however, the head of the Small Business Administration, an agency charged with fostering and supporting small business, was rather curtly dismissed from office. This man's policy was to use sparingly the funds entrusted to his care. Instead of distributing government funds he had set out on a program of organizing private agencies to help small business and he had said, courageously and truly, that guides to good management rather than credit was the need of small business.

What specific thing caused this man's dismissal has not been revealed. But it is common knowledge that his policies offended certain groups which claim to speak for small business, that these groups had been able to obtain Congressional support and that pressure was brought on the White House to modify or reverse the policies instituted.

Right now, the Secretary of Agriculture is under heavy attack by several pressure organizations. He has refused price supports to a group of cattle raisers who descended upon him in Washington en masse. He has reorganized the soil conservation service so as to decentralize its operations, and a howl goes up even from some of the same people who give lip service to the cause of states' rights.

The policies of both of these men were in line with what President Eisenhower has proclaimed as his policies. This makes it hard for us to understand the dismissal of the head of the SBA and the far from active support given Mr. Benson by the President.

The difficulty seems to be that the President, who sincerely wants to exercise the powers of his high office for the good of all the people, has come to realize that the pressures of groups of citizens and of leaders in his own party can not be entirely ignored. This is true because without the support of other men the President can accomplish nothing. He must maintain his position as political leader of his party. Without support in Congress and the confidence of voters everywhere he cannot hope to achieve any of his programs.

Dwight D. Eisenhower went through a political experience similar to the present one soon after his nomination. He was pulled and tugged at by those who preached political expediency. Fortunately he refused to be other than his true self. We still have faith in his complete sincerity.

Southerners above all others who believe in the decentralization of government—and seven out of the sixteen Southern states helped to elect him—should help to make his task easier by refusing to look to Washington for any special economic privilege whatsoever.

Political Solution to Farm Problem Now Seems Inevitable

Wisconsin election results insure rigid farm price supports regardless of strain on our economy.

By Robert S. Byfield

Financial Editor

ONE of the most important domestic economic problems facing the country at this moment is the support of farm product prices. In view of the developments of the past month, it now looks more than likely that its solution will be attempted on a political basis rather than one grounded upon facts, statistics and the best interests of the country. What happens to farm prices is of primary interest to the holders of corporate securities and this is particularly true with respect to the holders of shares in business corporations leaning heavily upon consumers in the agricultural sections of the country. In view thereof we felt it desirable to present certain data relating to the farm problem prepared by a highly regarded authority in this field.

It was almost a foregone conclusion that farmers would express satisfaction with the current support program and wish a continuance of high parity loans. They realize that they are living in a prosperous country in which with only 6% of the world's population and 7% of the world's land area, we are coming close to out-producing the other 94%. We have 4/5ths of the automobiles and ¾ths of the telephones in the world. We produce half the electric power and have a larger portion of our young people attending high schools and colleges than any other country. The farmer sees all this but does not realize he too has received great benefits not only through the high prices of recent years, but he has been able to increase his total output almost 44% in excess of the pre-war period of 1935-1939.

American farmers are in very prosperous shape. At the beginning of this year they had nearly $22 billions in financial assets, including currency, U. S. bonds, bank deposits and investments. They had over $17 billions of machinery and motor vehicles, including 4,200,000 tractors, 2,400,000 trucks and about 4,350,000 automobiles. Agriculture is a $165 billion business with total debts of less than $16 billion. Farms are largely mechanized, there being ony about 6,000,000 horses and mules left on farms, while about 40 years ago there were nearly 25,000,000. As mechanized equipment has come into use it has released millions of acres from feed production and has given the farmer the advantage of going into the fields for short periods of time when weather conditions were favorable. Thus he can plant and harvest much more efficiently and very often the selection of those periods make all the difference between good crops and crop failures. Such growing efficiency is the key to lower prices, wider markets and a more stable income. It provides a base upon which agriculture can more easily make an adjustment in a changing economic scene. In fact, the successful farmer today is essentially a businessman. He uses capital in the form of land, machinery, livestock and buildings.

While there is a good deal of talk about smaller farm income, the fact is that cash receipts from marketings during 1953 will still total about $31.2 billion, or only 4% below 1952. The total vaue of marketings is at a record high and actually 4% larger than last year, but as an offset prices of farm products are averaging considerably lower as in the case of cattle. It is not expected that the gross income of farmers in 1954 will be any better than at present and in fact may be a little smaller.

While for the immediate future there are undoubtedly very considerable difficulties in store for agriculture, the long run outlook is much brighter. There are 6 persons in our population today for every 5 in 1940, but in contrast thereto there are less than 5 persons on farms today for every 6 in 1940. This means that the farmers have more customers and there are fewer persons in agriculture to share in total income and total assets. This trend is likely to continue because of further mechanization, increased use of fertilizers, improved seeds, more modern animal husbandry and other developments in technology. The future balance sheet of agriculture is considerably better than it appears on paper.

It is in the light of the above that the question of maintaining parity for farm prices must be viewed. When parity was first considered as a desirable adjunct to the welfare of the farmers, the yields per acre were much smaller than they are at present. After all, the base period is 1909-1914 at which time our yields on wheat, corn and oats per acre were far smaller than they are at the present time because of subsequent modernization and technology. Thus on an acre of land farm parity is much more favorable to the farmer today than it was prior to World War I. But this is something that is seldom if ever considered when weighing the cost of commodities for farm living in return for farm production which is the basis of the parity concept. The original purpose and the general theory behind farm legislation was to bring back prices of farm products to this parity relationship as of the base period. However, by computing each individual bushel of corn or wheat instead of the farm income per acre, the early concept has been destroyed and the true index of the relationship to the 1909-1914 period has been lost. The real result is that the farmer is getting a much more favorable deal than was ever intended. To put it another way, he is getting all of the benefit of the superior technology, inventions and research of the past several decades or even longer and the consumer is getting exactly nothing. In fact, the consumer pays twice to give the farmer a bonanza that was never intended. First, he is paying extraordinarily high prices for food, and, second, he is paying taxes to the Federal Government in order to provide the wherewithal for price supports.

Farm price supports were created to provide relief in a situation where it was believed that the national interest required it. The present subsidy is based almost entirely upon political considerations and not upon farm distress. Depending upon the weather and the resulting crop yields of the years immediately ahead, farm subsidies may cause a very severe strain upon our economy. Furthermore, there may be demands from other segments of the economy to obtain "handouts" merely because the farmers are getting one. The Federal budget is bound to suffer. In the long run, the effect may be inflationary, but in any case, the result will not be healthy.

The agricultural implement manufacturers are already experiencing some contraction of orders. This trend will probably be continued. On the other hand, the demand for fertilizers, insecticides, pesticides and other chemicals calculated to increase the yields per acre should be stimulated because of the structure of the farm price subsidy system which we have pointed out.

Industrial Research

The independent research institute aims to solve the basic technical problems of industry. It is growing in numbers and services.

THE independent industrial research institute is an American development. Conceived by a Canadian, Robert K. Duncan, professor of chemistry at the University of Kansas, the first institute was founded by A. W. and R. B. Mellon of the Pittsburgh financial family. Mellon Institute for Industrial Research was established in 1913 and is the oldest of the independent industrial research institutes. Mellon Institute and others of its general type are distinguished as nonprofit organizations. During the last forty years six other institutes for industrial research have been established in the United States. Research departments or institutes have been set up at many universities, but these are not classed as independent.

Professor Duncan believed that the application of scientific, in place of empirical, methods to industrial problems would yield large financial returns. The rapid growth of industrial research in general and of the independent institute in particular has thoroughly proven his view.

The independent industrial research institute is a special type of organization which now occupies an important place in American business. At present, pure or applied research in a variety of fields is carried out by private industrial companies, departments of universities, foundations, government bureaus, commercial laboratories, consultants, and the independent institutes. The latter do not attempt to compete with any of the others just listed. Instead, the institutes seek to cooperate with all other research agencies.

An independent industrial research institute is defined as an endowed or privately established organization which undertakes to solve basic problems of industry by scientific methods at cost. Its services are broadly available to both large and small companies, government agencies, trade associations, and individuals.

The organizations usually regarded as independent industrial research institutes are the following: Mellon Institute, Pittsburgh, Pa. (1913); Battelle Memorial Institute, Columbus, Ohio (1929); Armour Research Foundation, Chicago, Ill. (1936) (cf. paragraph below); Midwest Research Institute, Kansas City, Mo. (1944); Southern Research Institute, Birmingham, Ala. (1945); Stanford Research Institute, Stanford, Calif. (1945); and Southwest Research Institute, San Antonio, Texas (1948). The figures in parentheses mark the years when the institutes were founded or began to function. Three of the institutes—Armour, Midwest, and Southwest—were put into operation under the guidance of Dr. Harold Vagtborg, now president of Southwest Research Institute.

Strictly stated, Armour Research Foundation is not an independent institute. It is part of the Illinois Institute of Technology. However, Armour operates on about the same basis as most other institutes.

Mellon Institute and Battelle Memorial Institute are endowed. With the exception of Armour, the other institutes were organized by private individuals or groups. These institutes are not endowed but undertake to accumulate capital funds from numerous contributors. As intimated, the Armour Research Foundation was established by the Illinois Institute of Technology.

All the institutes cater for research work on a national basis. Some engage in foreign operations. Those established recently tend to specialize in regional problems. Of late years, several institutes have grown very rapidly. Battelle Memorial Institute now has a physical plant valued at upwards of $15 million and a staff of over 2,000. It currently does a business volume exceeding $1 million a month. Within five years, Southwest Research Institute increased personnel from a few employees to about 500 while the dollar volume rose from a nominal amount to a rate of approximately $3 million per annum. In the fiscal year 1951-1952, Armour's billings were over $8 million.

The independent institutes, whether endowed or privately subsidized, aim to be self-supporting. At the same time, they have philanthropic motives. Broadly, they undertake to render at cost a public service in research that can not be equaled elsewhere. These institutes are independent of industrial companies, government bodies, and other outside influences. The principal definitive objective of the institutes is to solve basic technical problems of industry. In order to carry out this objective they provide staff and facilities for the scientific discovery and elucidation of facts. Needless to say, perhaps, all work is done on a strictly impartial basis.

Some broad objectives aimed at by the industrial research institute in handling work for sponsors are listed below:

(1) Solution of specific industrial problems; (2) reduction of costs; (3) development of improved or cheaper raw materials; (4) development of new products; (5) elimination of scrap and other losses in manufacturing; (6) simplification of manufacturing methods; (7) general improvement of competitive position; (8) utilization of by-products or wastes; (9) evaluation of plans for expansion or diversification; and (10) planning of profitable research programs. Various others might be mentioned.

The institutes are notably dollar conscious. They try to give the sponsor full value for his research expenditure. Also, they discourage programs for which there seems to be little hope of commercial success. However, the institutes do carry on projects in pure research both on their own account and for others. It is understood that these projects may offer no discernible hope for practical application. The institutes do not undertake routine testing.

In summary, the object of the institute is to provide a "private laboratory" and a staff of skilled investigators on a nonprofit basis for all who may need its particular research services.

Any company or agency which contracts with an institute for research work is usually referred to as a sponsor. As a preliminary to a contract, the institute and a prospective sponsor jointly consider the research problem to be solved. The problem is defined in detail, the objectives are stated as precisely as possible, and the work to be undertaken is described. If the problem is amenable to research methods, and if the subject does not conflict with any prior commitments of the institute, an estimate is made of the time required and the cost. Then, a proposal is prepared and submitted to the prospective sponsor.

The cost of a research project to a sponsor depends upon the kind, scope, and duration of the necessary work. Contracts have ranged from less than $5,000 to upwards of $300,000. Some have been completed within a few months. Others have been carried on over a long period of years with renewals at intervals. In any case, the sponsor pays only the direct cost of the research plus a proportionate amount of the overhead. The direct cost is usually made up of staff salaries and supplies.

All investigations carried out for sponsors are confidential, and no results may be published or otherwise disclosed without authority of sponsors. Any discoveries made during the course of the work are assigned to sponsors so that they will control any resulting patents.

As the work proceeds, close cooperation is maintained by the institute with the sponsor. He usually appoints a representative or committee to review the

(Continued on page 124)

Scientific Plant Site Selection in Spotlight

Decentralization and Cost-Cutting Trend Continue South's Industrialization at Rapid Pace.

By Sidney Fish
Industrial Analyst

As the peak of the defense production program is passed, competition among the various sections of the country for new industries is becoming increasingly keen. Yet there is every reason for the South to feel confident that it will continue to get more than its prewar share of new plants, and that industrialization will go ahead at a rapid pace.

Construction is continuing at a high level—much higher, in fact, that had been thought possible when we looked forward to this stage of the defense program two or three years ago. Manufacturers are finding it necessary to continue to decentralize, diversify, modernize and expand their facilities.

Competition is playing a big part in this continued large scale investment in plants and equipment. For producers who are currently located in old, poorly located, high cost plants, are finding that a relocation of their facilities is one of the surest methods of effecting important economies.

Competition has already squeezed out a large part of the profits which were obtainable during the years 1945 to 1952 in many industries. Under present conditions, even where no additional production capacity is needed, management is finding that it is desirable, and in many cases necessary, to bring costs down by moving into a modern plant that is built for low cost production and distribution.

There are indications already that plant construction by certain industries in the United States will be as much as 10 per cent lower next year than in the record-breaking year of 1953. The fourth quarter of this year is already showing a moderate dip in new plant investments, in the nation as a whole, from the recent precedent-shattering pace.

A survey by the National Industrial Conference Board recently showed that industry's capacity to produce goods has been rapidly catching up with the demand. The Conference Board's survey showed that in only 7 per cent of the companies studied is current demand still in excess of their capacity to produce, while 17 per cent of all companies replying found that their present productive capacity is beyond the needs of consumption.

The survey showed that 46 per cent of the companies plan to reduce their 1954 capital expenditures below the 1953 rates, as against only 14 per cent which expect to increase their spending, while the rest foresee little change in their spending next year compared with the levels of 1953. This represents a substantial shift in spending plans, for this year, 40 per cent of the companies said they expected to spend more than in 1952 on capital projects, while 33 per cent planned to reduce their spending this year. The survey showed that more companies plan to spend an increasing share of their 1954 capital investment funds on replacement of obsolete facilities, and on general modernization work. Almost 95 per cent of the companies studied said that the rise in interest rates would have no effect on their capital investment programs.

Several encouraging factors stand out in the capital investment program that make it fairly certain that new plant investments will remain at a very high level, particularly in the South. Here they are:

1. A large group of companies, especially those ranking below the "industrial giant" category, still have not acted on modernization and decentralization programs which have been under discussion by those companies since 1945. These companies are highly conservative, and in the postwar years, they hesitated to place large sums in new plants at price levels which they regarded as "inflated."

It is now becoming clear that substantial deflation of price levels is not likely or feasible. The swiftness with which the Eisenhower Administration has moved to end fears of excessively tight money shows that efforts will be made to support price levels, employment and business activity. Under those conditions, companies that have hesitated to invest in new plants will do so during the next few years, because they see opportunities to cut costs and strengthen their competitive position by doing so.

2. Even if there is a dip in industrial activity during the next year or two, it is not likely that modern industrial real estate will become idle in any sizable amount. There is far too little of such modern capacity. It is estimated by leading real estate brokers that only 10 per cent of the manufacturing companies in this country are housed in modern one-story plants. The rest are located in inefficient old multi-story plants or in city lofts. Such obsolete plants mean high production costs, because of the time wasted in moving men and goods up and down elevators, and because modern, continuous assembly and mechanical materials handling methods are not feasible in them.

Within the next ten or fifteen years, it is likely that the proportion of manufacturers operating in efficient, one-story plants will rise to at least 50 per cent. That would mean a five-fold increase over the present percentage. A big backlog of industrial modernization thus remains to be accomplished. Much of it will have to wait until the individual manufacturers can arrange financing. But already, many of them have the funds, realized through satisfactory profits in recent years. And the forthcoming easing of corporation tax rates should help many more to raise the needed funds. In some cases, local communities are raising funds to build one-story plants for new employers to lease or buy.

3. Competition is placing new emphasis on decentralization of plants and warehouses. More than at any time in the last fifteen years, producers are rushing to build facilities which will enable them to serve their customers quickly and well—and at low cost in freight. The recent resumption of freight absorption by steel, cement and other industries means that plant and warehouse facilities must be carefully analyzed from this standpoint—how to get goods to the largest number of customers at the lowest possible cost. This is bound to affect theories regarding the distribution of plants.

Several plant site selection factors are now being accorded much greater weight than formerly, as industry moves into a competitive economy. The science of choosing the best possible plant site for a given industry has been highly developed. The big construction companies which build industrial plants have established plant site location units within their organizations, to evaluate the various factors which enter into a sound, final choice.

Fortunately for the South, these site location experts see many advantages in locating new plants in Southern states. They are laying emphasis on the fact that in many Southern areas a fine productive type of labor is steadily being released for industrial jobs by the mechanization of agriculture. To a great extent, such labor can still be hired well below the levels at which it can be recruited in other parts of the country, because living costs are generally lower in most Southern cities. In addition, plants set up in many Southern cities and states will not face restrictions on production such as are imposed on some Northern plants by labor unions.

The big savings that can be realized through the hiring of efficient Southern labor were the attraction that recently led one Northern employer to chose a

site for a plant to employ 1,500 workers in Georgia.

This employer estimated that his new one-story plant would cost him $3 million. But he calculated that savings resulting from the increased productivity of labor, etc., would run at the rate of $1 million a year, enabling him to pay off this investment in three years. On that basis, it became essential for him to move his plant from his present location, because he could find no other factor in connection with his business which would so quickly place him on a basis to meet severe competition.

Competition, too, is leading employers to place greater emphasis on sound, low-cost marketing. A case in point is the decision of the Jones & Laughlin Steel Corporation to establish new warehouses at Louisville and Nashville this year.

The Louisville warehouse will serve 109 counties in Kentucky, southern Indiana and northern Tennessee. The site was chosen because of the importance of Louisville as a growing metalworking community, with such new, big plants as General Electric's Appliance Park, and other big and small installations.

In the past, this district had been served by Jones and Laughlin from its Cincinnati warehouse, 125 miles away. But competition means that a warehouse must be ready to give quick delivery on all kinds of steel, and Louisville demanded such service. The steel consumers, when steel is plentiful, do not like to tie up capital in large steel inventories.

Similarly, other steel companies will think in terms of shifting more of their finishing capacity to sites where they can better serve the South's new industrial plants.

Another factor which is being given close attention in the location of a new plant is the desirability of the community as a place to live and work. This factor includes such questions as the number of banks, number and capacity of schools, churches, local government and its indebtedness, fire and police protection, medical and hospital facilities, recreation, universities and trade schools, housing, cost of living, climate, zoning, room for plant expansion, hotels and restaurants, availability of services for maintenance and subcontracting, and proximity to large cities.

The desirability of the community as a place to live is particularly important where the new employer plans to move technical and supervisory executives to the site. Unless the new location appeals to those valued executives, the employer may find it difficult to keep them.

For that reason, A. Kingsley Ferguson, vice president of Walter Kidde Constructors, Inc., says that employers are being urged by his company, after selecting a new site, to give production supervisors, key foremen and engineers an opportunity to see the town in which they are going to live. In some cases, employers grant vacations of a week to these executives, so that they can study the town, learn to like it and make plans to move.

Mr. Kidde points out that his company applies a point system to any new location, to ascertain its desirability for a specific employer. This point score is not arbitrarily arrived at but is related directly to the employer's actual costs of production. The relative importance of the factors vary from industry to industry and even from plant to plant within an industry.

To assist in assigning the right point score to each factor, the company's business is analyzed. For example, in the case of one company, it was found that expenses that vary with the plant location amounted to $6.5 million or 37 per cent of the sales dollar. Among these variable costs, total payroll comprised $5.4 million, or 30.7 per cent of the sales dollar. Hence, very high point scores are assigned to the labor factor. Small values are assigned to such items as utilities, which comprised only .6 of 1 per cent of the sales dollar. Freight and shipping expense, which comprised 2 per cent of the sales dollar, in this instance was given a slightly higher point score. Other variable factors were taxes, which amounted to $150,000, building depreciation, .4 per cent, and building maintenance, .1 per cent; insurance, .6 per cent, and travel of officers, .2 per cent.

It is noteworthy that taxes do not always represent an important item in determining the suitability of the location. Hence, communities which are laying heavy emphasis on low taxes, or tax exemption for a period of years, might be well advised to give more attention to labor, markets, living conditions, and other factors which are often given a heavier weight when an employer makes his selection of a site.

Numerous mistakes are made by employers in the selection of plant sites. A. T. Waidelich, vice president in charge of research of the Austin Company, engineers and builders, says that most of these mistakes arise from the failure of the employer to carry out a systematic survey of all of the factors entering into the various locations. In some cases, for example, water supply may be a dominant consideration. This is particularly true in the case of chemical and pharmaceutical companies. The labor factor is so important that many employers are now making a careful study of that item in the community itself, instead of relying on a long-range appraisal based on a few statistics on wages, the supply of labor, etc.

Industry is getting set for a modernization and decentralization program that will carry on for a decade or more. Southern communities stand to benefit greatly from this trend. They will reap especially substantial gains if they set up an organization which can provide detailed information on those factors that are most important in plant site selection.

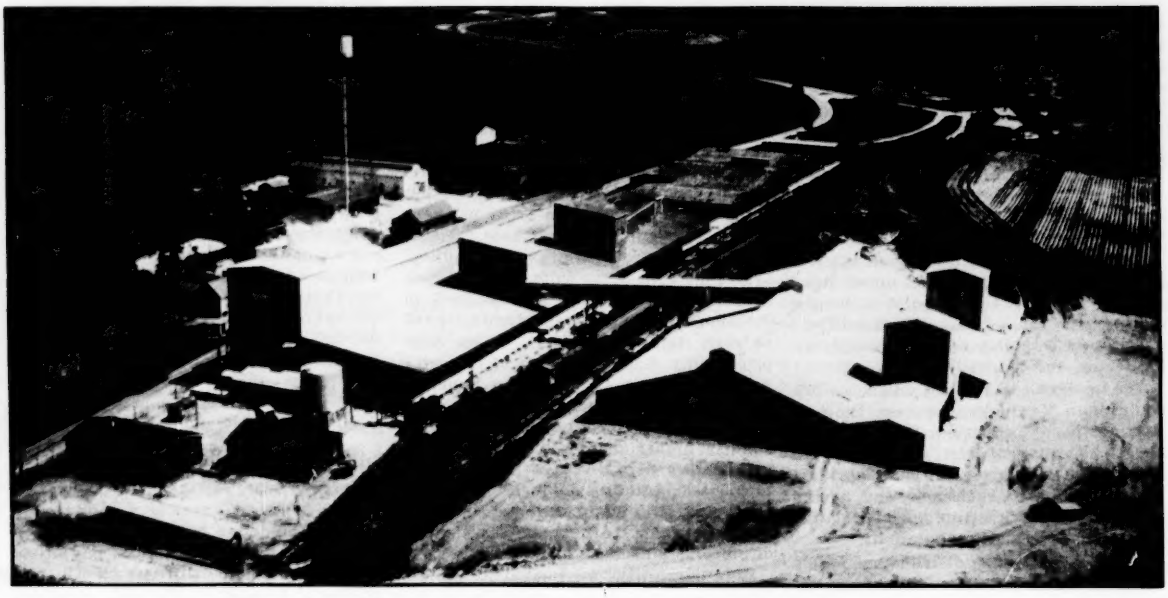
Million-Dollar Box Factory For Albany, Ga.

A million-dollar corrugated box-fabricating plant with an annual payroll of more than $200,000 will rise on Albany's northern outskirts. Maxwell Brothers, Inc., of Chicago will employ from 75-100 workers, about half of them women. Construction will begin soon on the building which will contain more than 120,000 square feet of floor space. The plant will be on a Central of Georgia railroad siding, and have facilities also for truck loading.

Those who will be supplied by the Albany concern include food packers, candy and soap manufacturers, meat packers, the toy industry, beverage bottlers, clothing and furniture manufacturers, handlers of glassware, medicines and drugs, radio and refrigerator manufacturers and others.

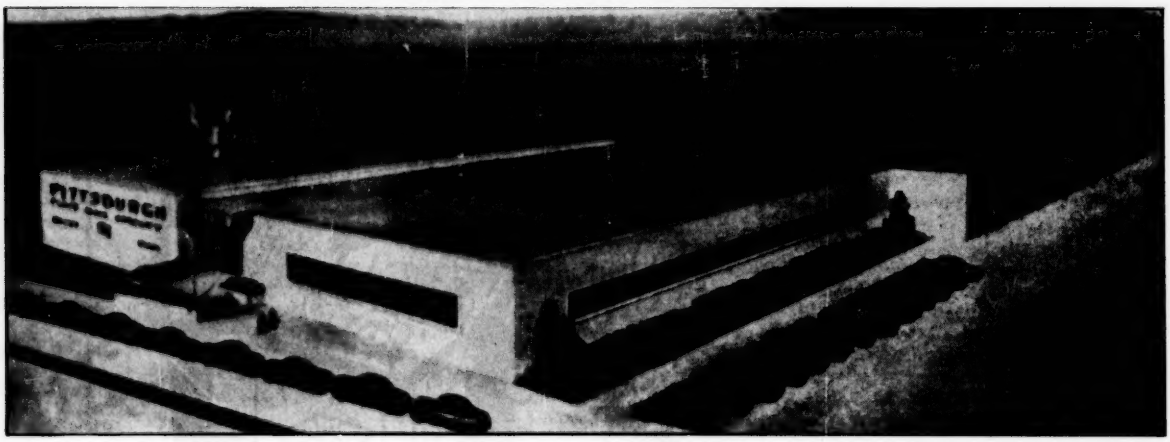
"We have 3,842 employees and every one of them has heard about your baby, so I'm transferring you from accounting to advertising!"

INDUSTRIAL



IN NORTH CAROLINA

Aerial view of Dixie Guano Company's fertilizer-manufacturing plant at Laurinburg, showing at right, the recently completed 39,000 square-foot addition designed and fabricated by Luria Engineering Company, Bethlehem, Pa.



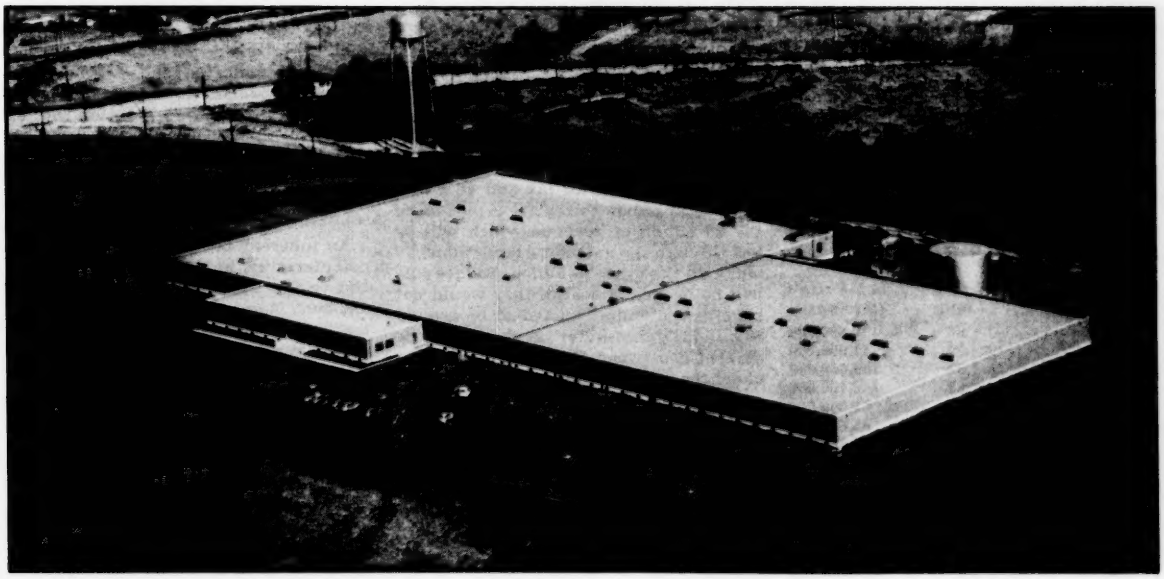
IN TEXAS

Pittsburgh Plate Glass Company is building this warehouse and office branch in Dallas. The 83,000 square-foot structure will be the largest Pittsburgh installation of its kind in the nation. Cost is in excess of $500,000.

EXPANSION

IN MISSOURI

New dock being built by the Contracting Division of Dravo Corp., Pittsburgh at St. Louis. It will facilitate the handling of coal and coke at the Missouri Coke and Chemical Division plant of Great Lakes Carbon Corp.



IN SOUTH CAROLINA

White Horse Mill in Greenville is undergoing expansion that will significantly increase the plant's capacity. Included in the program is the installation of 6,000 new spindles and 120 looms. Daniel Construction Co. is the builder.

Planned Tax Cuts May Save South $1.8 Billions Annually

By McLellan Smith

THE 16 southern states will realize Federal tax savings of a bit more than $1.8 billion annually under definitely planned reductions in the approaching calendar year. Scheduled to die at the end of 1953 is the excess profits tax, while individual income levies will be automatically lowered by approximately 11 per cent beginning next January 1. Following these year-end automatic reductions will be automatic April 1 reductions on corporate incomes and certain of the excise levies. Treasury experts estimate the cuts will reduce the national "take" by Uncle Sam to the tune of $8 billion annually, a potential saving of $1,824,000,000 to the southern states as shown in the accompanying table. On a pessimistic note, new Federal levies to replace part of the $8 billion to be lost by automatic cuts are in the offing, but more on the new taxes later.

The Following Table Shows the Percentage of All Federal Taxes Borne by the People in Each of the 16 Southern States and Applies that Percentage of the $8 Billion Savings to be Anticipated From Scheduled Automatic Reductions in U. S. Taxes

STATE	*Percentage*	*Each State's Savings*
Alabama	.96	$ 76,800,000
Arkansas	.52	41,600,000
Florida	1.37	109,600,000
Georgia	1.33	106,400,000
Kentucky	1.05	84,000,000
Louisiana	1.07	85,600,000
Maryland	1.88	150,400,000
Mississippi	.50	40,000,000
Missouri	3.04	243,200,000
North Carolina	1.46	116,800,000
Oklahoma	1.01	80,800,000
South Carolina	.67	53,600,000
Tennessee	1.19	95,200,000
Texas	4.27	341,600,000
Virginia	1.47	117,600,000
West Virginia	.76	60,800,000
Total Southern States	21.55	$1,824,000,000
Remainder of U.S., including D. C., Hawaii and Alaska	78.45	6,176,000,000
U. S. Total	100.00	$8,000,000,000

To those who doubt automatic reductions, probably basing their doubts upon President Eisenhower's September 21 speech in Boston in which he said, " . . . there is no sacrifice—no labor, no tax, no service too hard for us to bear to support a logical and necessary defense of our freedom," it should be pointed out that the President, Treasury Secretary Humphrey and Ways & Means Committee Chairman Daniel A. Reed (R., N.Y.) have said nothing will interfere with the automatic tax reductions. It is possible that the President was warning would-be aggressors that we are prepared to pour out gold, as well as blood, if need be.

Later, at a Washington press conference, the President "shut the door" on a general Federal sales tax at the retail level, but left it open for a national sales tax at the manufacturer's level—a revenue source long advocated by the National Association of Manufacturers, which would exempt processed foods from the levy. The NAM estimates that such a levy would raise $1.1 billion for each percentage point of the tax. Treasury experts, for some months, have been studying this form of tax and at a rate to raise $5 billion to replace a portion of the $8 billion of revenue which will be lost through the automatic reductions. To make up the other $3 billion, budget cuts will be needed, but even they would not balance the budget, slated to be around $9 billion "out of kilter" at the end of the current fiscal year. However, tax savings under the automatic reductions will mean much to the individual and to business, and in ways to expand the nation's economy, thus producing more revenue for the Government during the coming years.

To point up these savings and what they will mean in the long run, take a look at six large U. S. corporations whose total annual operations run around $7 billion. Their estimated 1953 profits, before Federal taxes, will add up to $523.2 billion—$162.6 billion, after taxes. Demise of the excess profits tax will save the group—a good cross-section of industry—$85.8 million a year, and the April 1 automatic reduction in the corporate income rate will save them another $25.6 million—a total of $111.4 million. These savings will go into increased dividends to stockholders (subject to income tax) as well as into expanded production facilities, new equipment, etc. It all adds up to an expanded national economy, ergo more Federal revenue. Multiply six by 50, and you get a more nearly national view.

For the individual, scheduled automatic tax reductions mean a number of things, most of which will contribute to the national economy. For the individual taxpayer, his savings (depending upon gross income) will buy anything from a new outfit for the head of the household to a zestful vacation for the whole family. In between could be labor-saving appliances, new furniture, and countless other articles which serve to turn industry's wheels.

Dimming the picture for the individual taxpayer is the contemplated tax (probably five per cent) at the manufacturer's level. This could raise the consumer's cost of goods (food and food products excepted) by about 9.6 per cent. To simplify, a manufacturer produces and sells $100,000 worth of goods on which he pays a tax of $5,000. The jobber, working on an assumed mark-up of 20 per cent (the general average), resells the $100,000 worth of goods for $120,000, plus $6,000 (representing the $5,000 tax passed to him by the manufacturer and a 20 per cent mark-up on the tax). The retailer, perhaps working on a 60 per cent mark-up, asks $201,600. He, like the jobber, has taken a mark-up on the excise at the manufacturer's level, passed to him by the jobber, with the latter's 20 per cent mark-up. Without the mark-ups on the tax, the retailer would move the merchandise for $192 thousand.

To those who argue that the manufacturer's tax should be kept separate and not subject to mark-up, it is pointed out that such separation procedure would require complicated and expensive accounting systems, while both jobber and retailer are entitled to profit on the tax. After all, their cash working capital is tied up in the tax just as tight as if tied up in inventories, and jobber and retailer are morally entitled to profits on working capital.

An inherent danger of the tax on the manufacturer is that chiseling jobbers and retailers will inflate their mark-ups and then blame the "new manufacturers' tax." This danger, however, will be of short duration as competition enters the sales picture.

When the President said "No" to a National sales tax at the retail level, he showed not only political acumen but a due respect for the fiscal problems of the states. Politically, the retail sales (or gross receipts) tax would be unpopular and unable to clear Congress, while this type of levy has developed into a sort of "financial salvation" for most of the states. In fiscal 1953, ended June 30, the southern states derived 63 per cent of their revenue from a sales (or gross receipts) tax, while all of the states got 59 per cent of their revenues from this source. Three of the southern states—Florida, Texas and West Virginia—have no general retail sales (or gross receipts) tax, but tax retail sales of selected items such as motor fuels, alcoholic beverages, theatre admissions, etc. It could be paren-

thetically added that hundreds of municipalities have levies on retail sales of selected items. A second table gives a graphic picture of the states' dependency on the sales tax.

Getting back to the national fiscal picture as it affects all of us and the value of the dollar—the Administration is pretty well committed to automatic tax reductions which will pare a total of $8 billion from Federal revenue. For this may be substituted a $5 billion tax at the manufacturer's level, thus leaving a $3 billion gap. This will, no doubt, be taken up in budget reductions of a near like amount with foreign aid programs taking a slice of around $2 billion, most of the remainder coming from reductions throughout the various Government Departments. All told, the budget will not be brought into balance, but we will be closer to that goal—perhaps to be realized in fiscal 1955, with a resultant budget surplus (for reduction of the national debt) in the ensuing fiscal year.

In considering the budget, it seems the Administration has very definitely abandoned plans for an immediate balance, which might seriously dislocate the national economy, in favor of a balance two or three years hence, the balance to be achieved through tax cuts which will encourage business and the individual alike, and through efficiencies and economies in Federal operations.

STATE TAX COLLECTIONS
Fiscal Year Ended June 30, 1953
(Thousands of Dollars)

STATE	*Total Tax Collections*	*Sales and/or Gross Receipts Taxes*	*All Other Levies*	*% of Sales Tax to Total Taxes*
Alabama	**$ 158,963**	**$ 111,622**	**$ 47,341**	**70**
Arkansas	**102,492**	**72,194**	**30,298**	**70**
Florida (a)	**252,485**	**193,563**	**58,922**	**76**
Georgia	**218,055**	**177,735**	**40,320**	**82**
Kentucky*	**137,911**	**74,859**	**63,052**	**54**
Louisiana	**287,188**	**164,246**	**122,942**	**57**
Maryland	**165,486**	**93,312**	**72,174**	**56**
Mississippi	**112,427**	**81,296**	**31,131**	**72**
Missouri	**207,221**	**137,394**	**69,827**	**66**
North Carolina	**287,817**	**161,396**	**126,421**	**56**
Oklahoma	**196,181**	**117,481**	**78,700**	**59**
South Carolina	**159,477**	**116,122**	**43,355**	**72**
Tennessee	**185,458**	**133,393**	**52,065**	**72**
Texas* (a)	**447,430**	**204,672**	**242,758**	**46**
Virginia*	**188,654**	**85,805**	**102,849**	**46**
West Virginia (a)	**122,133**	**104,253**	**17,880**	**85**
Total, Southern States	**$ 3,229,356**	**$2,029,321**	**$1,200,035**	**63**
Total, U. S.	**$10,542,105**	**$6,199,047**	**$4,343,058**	**59**

**These States do not have a general sales or gross receipts tax, but have sales levies on selected items, such as motor fuels, alcoholic beverages, etc.*
(a) These States do not have individual or corporate income tax levies.

South Carolina To Get Another Kendall Plant

The Kendall Company, one of the nation's largest textile firms, has chosen a site for its seventh plant in South Carolina, Governor James F. Byrnes announced recently.

He said L. W. Bishop, Director of the Research, Planning and Development Board, has advised him that Kendall Mills will build a new finishing plant at Bethune, in Kershaw County.

The company already has two mills in Newberry, two in Pelzer, and one each in Camden, Edgefield, and Charlotte, N. C., being the largest manufacturer in the world of gauze, cheesecloth, tobacco cloth, and similar products.

These cotton mills include over 300,000 spindles and 6,400 looms. Kendall is the manufacturer of such well-known products as Curity diapers, Curity brand surgical dressing, and ten other products being used under the Kendall or Curity trade mark. The entire organization employs over 8,000 people.

"I am delighted that we have been able to persuade this fine company to make further investment in South Carolina," Governor Byrnes said. "I have known its board chairman, Henry P. Kendall, as a good friend for many years, as well as other officers of the company. We are proud to have them expand in our State."

Mr. Kendall, founder of the company which has four other plants in New England and three in the Mid-west, maintains a home in Camden.

Davies, U.S.S. Division Official, Retires At Roanoke

After fifty years of service with the steel industry Mr. Herbert A. Davies has retired from his post as vice president of the American Bridge Division of United States Steel Corp.

One of the most widely known steel executives in the South, Mr. Davies has been connected with what was for many years the Virginia Bridge & Iron Co. since 1903, with the exception of time out for a college education at Virginia Polytechnic Institute, and one year with Post & McCord in New York as a draftsman.

Returning to Virginia Bridge in 1910, he held various positions in the engineering, contracting and operating departments. He served as manager of the firm's Memphis plant from 1923 to 1926 and as manager of the Birmingham installation from 1926 through 1946. He was named vice president and general manager of the firm in 1946.

Virginia Bridge became a part of the U. S. Steel Corp. on February 1, 1936, and was merged into the American Bridge Division of USS a year or so ago.

"Say, pal, could you spare me a dame for a cup of coffee?"

PORT ACTIVITY

ALABAMA

Turner Named Vice President—Jerry P. Turner, general manager of Alabama State Docks, has been elected second vice president of the American Association of Port Authorities.

Turner was named to this post during a recent association convention in Toronto and his election puts the State Docks' manager in line for succession, two years hence, to the presidency of the Association which is composed of port officials from the United States, South and Central America and Canada.

The Association elected Robert H. Wylie, San Francisco, president. Other vice presidents named were Warren D. Lamport, Seattle, first vice-president and Lyle King, New York, third vice president.

Turner has been an association director the past two years. In addition he is first vice president of the Gulf Ports Association and is president of the Mobile Traffic and Transportation Bureau.

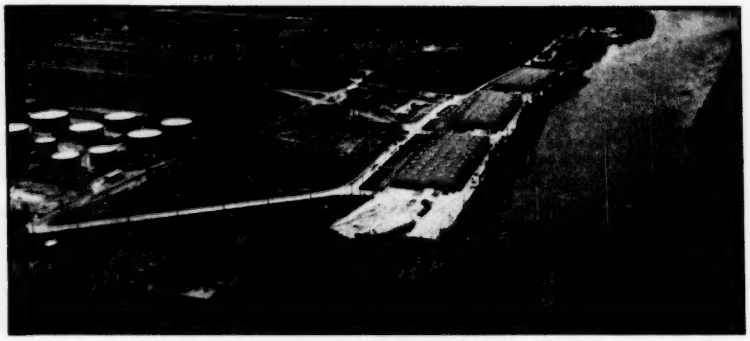
Cotton Business At Peak — Cotton business at Alabama State Docks is at its peak level for a three-year period according to Jerry P. Turner, general manager of the vast, $35,000,000 shipping facility.

Turner has announced that the Commodity Credit Corporation has recently shipped 25,000 bales of government loan cotton from California and West Texas for storage. The cotton is from the 1952 crop.

The cotton will be shipped out from time to time, moving either for export or to spinning mills in Southeastern states.

The last big consignment of cotton here came from the California-West Texas growing area in 1950.

The finest cotton handling facilities are available at Alabama State Docks which include a high density press and special mechanical equipment for handling cotton to and from storage and between storage and shipside. The high density compress has a capacity of 120 bales per hour. Sprinkler protected bonded warehouse compartments are provided for storage of 50,000 bales.



Aerial view of the Savannah State Docks and Warehouses. These modern facilities are owned and operated by the Georgia Ports Authority.

GEORGIA

Profit Reported — The Georgia Ports Authority is now a profit-making organization serving all citizens of the state without cost to them, according to William R. Bowdoin, chairman of the group which owns and operates the new Savannah State Docks.

Mr. Bowdoin, in a recent speech to the Macon, Ga., Rotary Club, said, "It is with justifiable pride that I report to you that we are now the only State agency in Georgia that is self-sustaining."

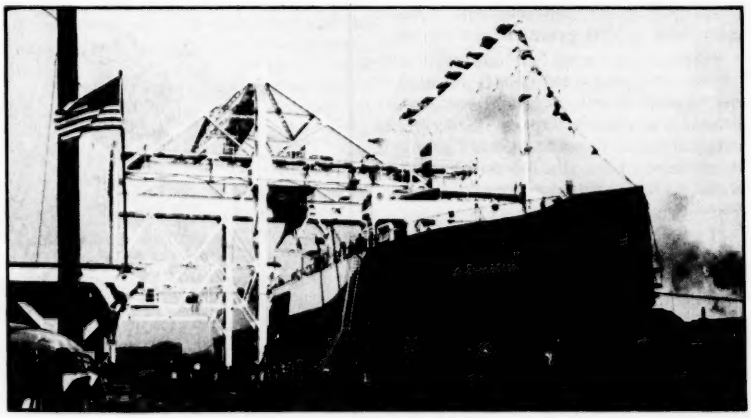
"Of the $6,000,000 invested in the Authority, $500,000 was appropriated by the General Assembly and the remainder was financed by the Authority, through the sale of revenue certificates in the open market," Mr. Bowdoin said.

"Therefore, on the investment of $1,308,100 by the State of Georgia, there now exists a physical plant valued in excess of $15,000,000," he pointed out.

The Authority chairman told his Macon audience that "although created by an act of the Legislature in 1945, the Georgia Ports Authority was not really activated until December, 1948."

"At this time Governor Talmadge had the wisdom and the foresight to purchase from the Federal Government at a cost of $808,100 the old Savannah Quartermaster Depot consisting of 407 acres of land on the Savannah River and on which was located over 2,000,000 square feet of warehouse space and 8 miles of railroad trackage," he explained.

"Since the formal transfer of properties to the Georgia Ports Authority in March, 1949, and until June, 1953, more than $6,000,000 has been expended to repair existing structures and to build 2,047 feet of steel and concrete marginal



Seatrain at its Savannah terminal, which was built on the Central of Georgia's Ocean Steamship Co. property at Savannah. Seatrain operates between New York and Savannah.

Board of Directors of the Savannah District Authority, from left: C. S. Sanford, Thos. Oxnard, W. H. Saussy, R. W. Groves, W. H. McGowan, Exec. Sec'y., F. O. Wahlstrom, L. C. McClurkin, M. W. Lippitt, T. H. Gignilliat, Counsel, Spencer Connerat, J. J. Bouhan, H. M. Garwes.

wharf 80 feet in width and of sufficient size to accommodate 4 ocean-going vessels of the Liberty class at one time," Mr. Bowdoin continued. "In addition to this, three transit sheds, fully equipped for day and night operation were constructed."

The Authority chairman also noted that seven miles of additional railroad trackage to the docks, warehouse and industrial areas have been added, giving the State Docks 15 miles of railroad, operated by the Savannah State Docks Railroad Company.

The Georgia Ports Authority is a public corporation, dedicated to two cardinal principles, Mr. Bowdoin said. "One, to be self-sustaining financially, and the other to serve the citizens of every section of our state in the development of industry, agriculture and commerce."

The general operation of the organization is divided into three phases, according to Mr. Bowdoin, an Atlanta bank executive.

1. The Georgia Ports Authority, which serves all of Georgia from offices in Atlanta, with branch offices and representation in New York and Chicago.

2. The Savannah State Docks and Warehouses, which is the Authority's wholly owned waterfront operation in Savannah consisting of the dock facilities and equipment, warehouse space and industrial tracts.

3. The Savannah State Docks Railroad, also wholly owned by the Authority, and consisting of 15 miles of track operated under ICC regulations for the purpose of expediting rail service required by the facilities.

Mr. Bowdoin was high in his praise for D. Leon Williams, Director of the Authority, and General Hugh T. Mayberry, manager of the State Docks and Warehouses.

He credited them with a "magnificent job" in reorganizing the operation, explaining that "their demonstrated ability and soundness of purpose have saved the Georgia Ports Authority thousands of dollars."

Total Traffic — Alabama State Docks and Terminals handled 451,921 tons of traffic in August, slightly (3 per cent) less than the record high of the previous month, but 32 per cent more than a year ago. Both inbound and outbound shipments topped the August 1952 figures by about a third.

The month's inbound traffic, 386,231 tons, was second only to July as the highest on record. Two-thirds was products of mines, about one-third manufactures and miscellaneous products, and fractional percentages products of agriculture and of forests. Total inbound shipments in the first eight months of 1953 showed a 34 per cent increase over the corresponding period of last year.

Outbound tonnage, though well above a year ago, was not on a level comparable to the peak inbound shipments. Outgoing traffic in August amounted to 65,690 tons, 58 per cent of which was manufactures, and miscellaneous products, with 30 per cent products of mines, 9 per cent products of forests, and 2 per cent products of agriculture. Inbound shipments for the year to date were somewhat (9 per cent) below the 1952 January-August total.

FLORIDA

Jacksonville

Gaining Since 1949—Diverse activities carried on within the Port of Jacksonville have enabled it to withstand economic pressures and show a steady gain in total commerce since 1949 and before. During 1952, for example, the port gained trade in every segment except exports. Growing waterway, coastwise and import trade offset the losses, however.

Recent Corps of Engineers reports on total waterborne commerce for the year 1952 bear out a prediction made by the Seafarer last January that the final reports would show a gain in trade.

Annual meeting—The South Atlantic Ports Conference will hold its annual meeting here November 31 and December 1, according to an announcement from J. Roger Stanfield, local director of port traffic and host to the conference. D. Leon Williams of Atlanta is president.

LOUISIANA

New Orleans

Swenson Leaves Port—Richard B. Swenson, Director of Publicity for the Board of Commissioners of the Port of New Orleans, has accepted an appointment as Chief of Public Relations for the Virginia State Ports Authority in Norfolk, Virginia, and has submitted his resignation to the Board.

Swenson has been with the Board since December 1, 1947, and has been director of publicity since May 1950. During this period, said Board President H. S. Hardin, "he has moulded an exemplary publicity program for the Board. Under his direction the department has disseminated publicity and advertising throughout the world about the Port in an effort to influence more cargo over New Orleans wharves. The Good Neighbor harbor inspection yacht (also under his direction)," continued Hardin, "has become a symbol of international hospitality. Swenson also has been an avid supporter of the cooperative civic spirit in the city, a friend of the press, and has taken part in many International House and Port sponsored trips to Latin America."

Before joining the Port of New Orleans, Swenson was, before the war, a partner in a photographic business in New York City which he gave up upon entry into the Army in 1942. Commissioned 2nd Lieut. in 1943, he served with the Transportation Corps Replacement Training Center at Camp Plauche in New Orleans, and later went to Japan with the first occupation troops. There he commanded the 21st Transport Corps Amphibious Truck Battalion and was promoted to the rank of Major, returned to the States and was separated from the Army in May 1946.

In announcing Mr. Swenson's resignation, Hardin said, "The Port of New Orleans is losing one of its greatest boosters and the city one of its most progressive citizens. Naturally, we wish him every success in his new undertaking."

Swenson is a member of International House, the Chamber of Commerce of the New Orleans Area, the New Orleans Board of Trade, National Defense Transportation Association, and the American Association of Port Authorities in which he serves on both the Public Relations Committee and the committee on International Relations.

MARYLAND

Baltimore

Cummings Heads American Export Line's Office—American Export Lines recently announced the appointment of Robert W. Cummings as Manager of their Baltimore office, succeeding Thomas E. Riley, who was retired on October 1, after having held that position for the past 26 years.

Mr. Cummings is a native of Connecticut where he attended the local schools. In 1925 he moved to Washington and accepted a position with the Merchant Fleet Corporation of the old United States Shipping Board as an auditor. This was his first association with the steamship industry. He was later transferred to Baltimore and served as Secre-

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PORT ACTIVITY

(*Continued from page* 67)

tary to the district officials of the USSB here.

In 1929 he joined the Baltimore staff of the Export Steamship Corporation, now the American Export Lines, Inc. Mr. Cummings is an active member of the Baltimore Traffic Club, the Propeller Club and the Masonic Order. His home is at 408 Oak Court, Catonsville.

"Sunflower Mariner" Launched — The "Sunflower Mariner," last of the five Mariner-class cargo vessels constructed at Baltimore for the Federal Maritime Administration, was launched at the Bethlehem-Sparrows Point Yard on October 23.

The new vessel, like her sister ships, is 561 feet long, 76 feet wide, of 12,000-deadweight tons and has a speed of 20 knots. The vessel, named in honor of the State of Kansas, was sponsored by Mrs. John W. Bricker, wife of the Senator from Ohio.

All of the ships of this class previously launched at Sparrows Point are now in active service, with the exception of one. This vessel, the "Show Me Mariner," named for the State of Missouri, is scheduled for delivery at the end of the year.

Coal Exports—Exports of coal at the Port of Baltimore aggregated 127,512 long tons on 16 vessels during September, according to data compiled by local coal pier operators. Last month's volume compared with 100,020 tons in August and 192,683 tons in the same month last year.

The recipient nations of coal shipped from the Port in September included Japan with 55,274 tons, Germany with 39,309 tons, Italy with 19,601 tons, Egypt with 10,103 tons and Newfoundland with 3,225 tons.

During the first nine months of the year 1,082,281 tons of coal on 142 ships have moved overseas from Baltimore against 2,279,279 tons on 283 vessels in the corresponding period of 1952.

Export Grain—Grain exports from the Port of Baltimore in September totaled 3,886,502 bushels, based on figures published by the Baltimore Chamber of Commerce, the local grain exchange. This was a decline of 787,064 bushels compared with shipments in August, but an increase of 2,276,366 bushels over exports in the corresponding month of 1952.

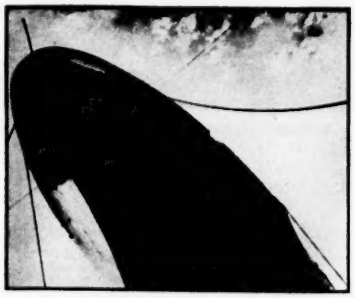
Shipments of grain to overseas destinations last month consisted of 1,337,395 bushels of wheat and 2,549,107 bushels of corn. Figures for the January-September period of 1953 show a total of 51,476,304 bushels of grain exported from the Port, against 54,495,870 bushels last year.

MISSISSIPPI

Gulfport

New York Importer to Use Port—A New York importer of sulphate has agreed to use the Port of Gulfport facilities on a year-round basis, a move which will mean approximately $600,000 to Gulfport business, according to Al S. Johnson, port director.

The firm of Bradley and Baker will make the Gulf Coast port its southern port for the distribution of ammonium sulphate during fall and winter months and phosphate during the summer months.



AT PASCAGOULA — Striking view of the Cotton Mariner, one of five fast cargo ships being built by Ingalls Shipbuilding Corp.

Johnson indicates that about 150,000 tons per year, comprising both types of fertilizer, will be shipped to Gulfport for distribution.

SOUTH CAROLINA

Charleston

Customs Receipts up 21 Per Cent—Reflecting a sharp increase in import cargo, customs collections in the Charleston district for the first quarter of the current fiscal year were 21 per cent greater than for the same period of the previous fiscal year.

Receipts for the three-months' period from July 1 through September 30, totaled $789,845, Collector of Customs G. F. Doscher, Jr., announced. This compares with $651,413 collected during the same three months last year, an increase of $138,432.

The rise in duties was accounted for chiefly because of heavy imports of Egyptian and Peruvian long-staple cotton, petroleum products, Brazilian Parana pine, rayon fiber, Scotch whiskey, steel products, cotton waste, Argentine canned meats, sugar, jute and a variety of manufactured products.

Collector Doscher pointed out that if the present upward trend in collections continues, and indications are that it will, the fiscal year's total duties will surpass last year's record collections of approximately $3,000,000.

12 Per Cent—There was a 12 per cent increase in cargo tonnage loaded and discharged at Ports Authority docks at Charleston during the first eight months of this year, over the same period in 1952.

Vice President—Roland A. Minnis, of Charleston, vice president and cashier of the Citizens & Southern National Bank of South Carolina, was named South Atlantic Regional Vice President of the Propeller Clubs of the United States at the convention in Cleveland, Sept. 24.

TEXAS

Beaumont

Expansion of Facilities—Even with recently completed additions to its facilities, the Port of Beaumont can not adequately handle the business that is available to it. Accordingly, the Port Commission's engineering committee has been called upon to determine exactly what is required at the port and to make a report covering these needs.

The aid of the port development committee of the Beaumont Chamber of Commerce is also being sought in the study. Officials point to the growth of the port since the port district was formed four years ago. Previous to that the port had been a department of the city government.

Port director, James H. Hartzog, told the commissioners that more and more business is becoming available to the port, and new facilities are badly needed. He said, "I used to go to bed at night worrying when the next ship was coming in. Now I keep wondering where we are going to put them."

Houston

Houston Names New Port Director—Warren D. Lamport, former managing director of the Port of Seattle, Washington, has been appointed port director for Houston by the Harris Navigation district. He succeeds W. F. Heavey, who resigned as port director last December.

Announcement was also made of the creation of a division of international relations, headed by Vaughan M. Bryant, former director of the Texas Good Neighbor Commission, and former director of Latin-American relations for the International House of New Orleans. Mr. Bryant's prime object will be the further development of trade between the United States and Latin American countries through the Port of Houston.

Bright Future — The Port of Houston will become one of the world's greatest industrial ports and the first industrial port of the United States within the next thirty years. That was the prediction made by Gaku Matsumoto, President of the Japan Port and Harbor Association, Tokyo, on a recent visit to Houston. Mr. Matsumoto, a veteran of thirty-one years' experience with the Port and Harbor Association, made his statement after viewing heavy industrial development along Houston's busy Ship Channel.

Pointing out that the development of the Port of Houston parallels that of the ports of Japan, he stated that 85 per cent of Japanese industries are located either on the major harbors or industrial canals

PORT ACTIVITY

and barge waterways having access to the sea. Houston, with its twenty-five miles of industrial property on both sides of the Ship Channel, has almost unlimited possibilities for industrial expansion, he pointed out.

Mr. Matsumoto promised Houston's port officials that he would use his best efforts to influence the Japanese government to establish a commercial representative at the Port of Houston in the near future in order to promote and enlarge the already-flourishing trade between Houston and Japan.

Record Year—The Port of Houston retained its rank of second port of the nation for the fifth successive year, according to official statistics for 1952 just released by the U. S. Army Engineers.

Houston first rose to the position of second port in 1948 and has held the title each year thereafter.

Its record tonnage of 46,607,179 for 1952 was from 6 to 8 million tons above other major ports in the nation, excluding New York, traditionally the No. 1 port.

Houston continues to maintain its record-breaking strides this year as unofficial figures released by the Houston Navigation District show that 30,028,441 tons of cargo already have moved across the wharves here in the first eight months of the year. This compares with 29,743,577 tons handled in the corresponding period in 1952.

Two Named to Port Posts—The Port Commission has appointed Warren D. Lamport of Seattle as general manager of the Port of Houston and Vaughan M. Bryant, formerly of Austin and New Orleans, as director of international relations, a new position.

Both men are widely known in shipping and port circles, not only in the United States but throughout the world.

Mr. Lamport formerly was director of the Port of Seattle and previously for a

V. M. Bryant W. D. Lamport

number of years was a commissioner and later a vice chairman of the Board of Harbor Commissioners of the Port of Long Beach, Calif. Mr. Bryant attained prominence for his work as director of Latin American relations for the International House of New Orleans and as director of the Good Neighbor Commission of the State of Texas.

Addition of these two men to the executive personnel of the Port of Houston will greatly strengthen the port's competitive position and is the first step in a worldwide campaign to obtain more general cargo business, the Port Commission said.

VIRGINIA

Norfolk

Grain Elevator Foundations Laid—Foundations for huge new grain storage bins that will nearly triple the capacity of the Norfolk grain elevator were laid last month.

The Norfolk and Western Railway facility (the only deepwater grain elevator between Baltimore and Mobile) is leased to the Continental Grain Company and operated as a public elevator.

The million-dollar construction project—scheduled for completion in May, 1954—will increase the capacity 170 per cent from 750,000 bushels to more than 2,000,000 bushels. There will be 32 new grain storage bins, each 24 feet in diameter and 106 feet high. Conveying machinery and an additional grain drier also will be installed.

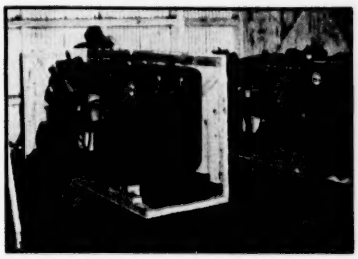
Continental, the world's largest grain handling company, first leased the elevator last spring and since has increased the volume of Norfolk grain exports several times over. In 1952 Norfolk shipped only 3.6 per cent of grain exported from the east coast. In April, Norfolk grain exports had risen to 16 per cent of the east coast total, with only Baltimore and Albany outranking the Virginia port. By May grain export figures had reached the highest point in the elevator's history.

Commenting on Norfolk's expanding role as a shipper of grain, the *Virginian-Pilot* said editorially, "The enlargement of this port's grain elevator capacity has been one of the important objectives of the Norfolk Port Authority. Norfolk is a natural transhipping point for grain grown in Virginia, North Carolina, and South Carolina, which have greatly increased their production over the past six years. Norfolk is clearly making large strides in a field of export operations which lend balance and solidity to a port structure."

Honorary Bolivian Consul Named—Stuart L. Banks, president of the Federal Contracting Company and of the Federal Construction Company, has been named honorary Bolivian Consul at the ports of Hampton Roads.

Mr. Banks' Consular territory includes Virginia, West Virginia and the Carolinas.

Tractor Exports Rise—Forty-six Midwest-manufactured diesel tractors, crated at shipside in Norfolk, were shipped to South America and to Turkey late last month. These shipments are typical of new export movements through Norfolk's two new packaging operations: the Norfolk Export Packing Company, based alongside the modern Lambert's Point



Tractor packaged for shipment at Port of Norfolk.

Docks, and the Dade Brothers Export Packaging facility adjacent to the huge Norfolk Terminals (Army Base) piers and warehouses.

The accompanying picture shows part of the packing operation, performed by experienced crating personnel.

Seal Appointed by New Port Unit—Admiral David H. Clark, director of the Virginia State Ports Authority, has announced appointment of Charles R. Seal as chief of the division of traffic and rate studies, and general counsel for the Authority. Mr. Seal, a native of Virginia, comes to the Authority from the Interstate Commerce Commission where, since Feb. 1, 1946, he has held the post of director, Bureau of Water Carriers and Freight Forwarders. He will join the Authority's staff on Dec. 1.

Port Leaders Warned—Virginia State Ports Authority Commissioner W. L. Pierce, of Richmond, warned a group of transportation men, several weeks ago, that if private enterprise is unable to meet competitive port conditions the State may have to step in.

Addressing the Norfolk-Portsmouth Traffic Club at the Norfolk Yacht and Country Club, Pierce, traffic manager for the British American Tobacco Company and Export Leaf Tobacco Company, pointed to Wilmington and Charleston as examples of state action to spur port trade.

According to an item in the *Norfolk Virginian-Pilot*, he reminded the group, "These are only my own opinions." Noting the "necessity for aggressiveness in the development of Virginia's chief natural asset," Pierce said: "Waterfront property that was not brought up to date in the last five years is outmoded."

SOUTHERNERS AT WORK

Cocke Named President Of Duke Power Company

Announcement was made on October 27 of the election of Norman C. Cocke, Sr., as president of Duke Power Company. Mr. Cocke was formerly a vice president of the company, and he succeeds E. C. Marshall who died in September.

Mr. Cocke joined the Duke interests in 1906 as an attorney. He is widely known both for his work with Duke Power and with the textile industry.

He was born in Prince George County, Virginia, attended Petersburg (Va.), Academy and was graduated from the New York Law School in 1905.

He is vice chairman of the board of trustees of the Duke Endowment and is acting chairman of the board of trustees of Duke University. He has been a vice president and director of Duke Power and of the Piedmont & Northern Railway since 1927.

R. S. Lynch Named To Notre Dame Advisory Council

Robert S. Lynch, president of Atlantic Steel Company, Atlanta, has been given the signal honor of being placed on the Advisory Council for Science and Engineering at the University of Notre Dame. He is the first man from the Southeast to be named to this council.

This appointment is effective immediately, and Mr. Lynch attended the Council's fall meeting on October 30, at Notre Dame. In connection with this regular meeting, the University dedicated its Nieuwland Science Center.

The Advisory Council for Science and Engineering was formed in 1946 and is comprised of men who are outstanding in their respective fields of endeavor. The present Council membership of twenty-two is being increased to thirty to obtain a better cross section of the nation's top science and engineering leaders.

Southwest Research Names Dr. George L. Cunningham

Appointment of Dr. George L. Cunningham, nationally known industrial scientist and research executive, to the staff of Southwest Research Institute, has been announced by Dr. Louis Koenig, associate director of the nonprofit laboratories.

A prolific inventor and holder of many patents, Dr. Cunningham was brought to the San Antonio research center to head a group of technologists working toward the advancement of the science and technology of inorganic chemistry and inorganic chemical manufacturing, Koenig said.

"This field," Koenig asserted, "has been somewhat neglected in times past in favor of organic chemistry, but more recently interest in it has been increasing. We are indeed happy to welcome so outstanding a man as Dr. Cunningham in order to supervise the sponsored research projects in this field."

Prior to joining the SwRI staff, Dr. Cunningham was associated with the applied science laboratory of the University of Cincinnati where, as a consultant, he developed a radically new type of

Dr. George L. Cunningham

alkaline storage battery construction, as well as a commercial process for the production of peroxides and superoxides.

Earlier he had been manager of technical service for the Columbia Chemical Division of the Pittsburgh Plate Glass Company, assistant and acting director of research for the Diamond Alkali Company, a member of the research and development group at Allied Chemical and Dye Corporation of New York, and technical director for the Commonwealth Engineering Company of Dayton.

Delta-C&S Re-elect Woolman To Presidency

C. E. Woolman of Atlanta was re-elected president and general manager of Delta-C&S Air Lines on October 20 to enter his 30th year as head of the airline and predecessor companies.

A dividend of 30 cents was voted payable on December 1 to stockholders of record as of November 13.

The annual meeting of stockholders re-elected all 13 directors as follows:

Richard W. Courts, Atlanta; R. W. Freeman, New Orleans; Edward H. Gerry, New York; John R. Longmire, St. Louis; C. H. McHenry, Monroe; Winship Nunnally, Atlanta; Travis Oliver, Monroe; Laigh C. Parker, Atlanta; Carleton Putnam, Washington, D. C.; Richard J. Reynolds, Winston-Salem; D. Y. Smith, Monroe; S. A. Stewart, Atlanta; C. E. Woolman, Atlanta.

The directors re-elected the following:

Carleton Putnam, chairman; C. E. Woolman, president and general manager; S. A. Stewart, executive vice president; Laigh C. Parker, vice president-traffic and sales; C. H. Dolson, vice president-operation; Junius H. Cooper, vice president-finance; Todd G. Cole, vice president-comptroller and assistant secretary; James H. Cobb, vice president-public relations and advertising; R. S. Maurer, vice president-legal; W. T. Arthur, assistant vice president-operations; T. M. Miller, assistant vice president-traffic and sales; Travis Oliver, treasurer; C. H. McHenry, secretary; Catherine FitzGerald, assistant treasurer.

Abernathy Elected Director Of American Gas Association

M. A. Abernathy, vice president of United Gas Corporation, Shreveport, Louisiana, was elected a director of the American Gas Association at the Association's thirty-fifth annual convention held in St. Louis, Mo., October 26-28, 1953. More than 5,000 delegates, representing gas utility and pipeline companies and gas appliance manufacturers from all parts of the United States and Canada, attended the three-day meeting.

Mr. Abernathy has spent nearly 33 years in the petroleum and natural gas industry since joining the Magnolia Petroleum Company in Dallas as engineer and landman in 1920.

In 1930 when the Magnolia properties were taken over by United Gas Corporation, he was moved to the Houston office as general superintendent of pipe lines.

On September 3, 1937, Mr. Abernathy was elected a director of the United Gas Pipe Line Company; on October 1, 1947, he became a director of United Gas Corporation; and on October 21, 1947, he became a director of Union Producing Company.

He was elected vice president of United Gas Pipe Line Company in 1937, and in May, 1947, assumed the additional duties of vice president of United Gas Corporation. On March 21, 1952, he was elected a vice president of Union Producing Company.

He has been active in American Gas Association and other gas industry affairs for several years. He previously served as director of A.G.A., and in May, 1951, was appointed a member of the Gas Industry Advisory Council of P.A.D.

(Continued on page 112)

FRONTISPIECE—PIPE DREAM. A huge piece of pipe 78 inches in diameter is used in "Cat" at one of Gulf Oil Company's numerous flow lines at a Texas refinery. ➔

The

THE TEXAS MARKET

PEOPLE-Incomes-Markets, the Big Three of economic progress, loom especially large in the case of Texas.

For, Texas has fared better than any of its sister states, and better than the average of the United States, with respect to growth of markets over the recent past.

Let's look at some figures:

Texas—Income & Expenditure
$ million

Year	Population (000)	Income	Consumer Purchases
1939	6,415	$ 2,332	$ 2,092
1951	7,991	10,827	9,245
1952	8,128	12,082	10,619
% Gain			
1951-39	24	364	341
1952-39	26	418	407

South—Income & Expenditure
$ million

Year	Population (000)	Income	Consumer Purchases
1939	45,176	$13,470	$12,060
1951	51,778	56,811	50,284
1952	52,661	61,460	54,873
% Gain			
1951-39	14	321	316
1952-39	16	356	355

U. S.—Income & Expenditure
$ million

Year	Population (000)	Income	Consumer Purchases
1939	131,669	$ 59,265	$ 49,189
1951	153,383	220,050	175,876
1952	156,000	240,314	192,596
% Gain			
1951-39	16	271	257
1952-39	18	305	291

The foregoing data, derived from source material of the *Blue Book of Southern Progress*, indicates an exceptional record for Texas in the matter of economic growth over the past decade or so.

It is easy to see from the tables that population, income and consumer markets have, between 1939 and the present time, expanded to a considerably greater extent in Texas than in either the South or the United States as a whole.

This fact becomes the more noteworthy when it is considered that Texas is the largest state in the Union, with probably a greater proportion of wide open space than is to be found in any other of the 48 states.

It has required highly intense growth and concentration of industry in the thirty urban centers of the State to bring about the record growth of markets that has taken place since 1939.

This intensity of growth has been substantial enough to give the State a unique record, as may be seen from the following tabular presentation:

Texas Business Volume Growth
1939 to 1952
Output—$ mil.

Industry	1939	1952	% Gain
Farming	$ 687	$ 2,328	238
Mining	555	3,219	480
Construction	200	2,067	933
Manufacturing	1,530	10,047	556
Utilities	480	1,989	314
Finance	247	1,420	474
Who. Trade	2,041	9,339	357
Retail Trade	1,804	9,129	406
Service Trade	366	1,489	306
All Enterprise	7,910	41,027	418

Southern Business Volume Growth
1939 to 1952
Output—$ mil.

Industry	1939	1952	% Gain
Farming	$ 3,759	$ 12,339	228
Mining	1,378	6,862	397
Construction	1,139	10,932	859
Manufacturing	11,190	56,405	404
Utilities	2,240	10,491	368
Finance	1,454	7,163	392
Who. Trade	12,093	50,912	321
Retail Trade	10,308	47,632	362
Service Trade	2,257	7,703	241
All Enterprise	45,818	210,439	359

United States Business Volume Growth
1939 to 1952
Output—$ mil.

Industry	1939	1952	% Gain
Farming	$ 10,766	$ 36,649	240
Mining	3,431	12,705	270
Construction	4,520	32,325	615
Manufacturing	56,843	256,056	350
Utilities	8,396	36,255	331
Finance	8,414	30,511	262
Who. Trade	55,266	214,797	288
Retail Trade	42,042	163,472	288
Service Trade	9,197	31,940	247
All Enterprise	198,875	814,710	309

The foregoing tables point up several outstanding facts.

Texas has been consistently outgaining both the South and United States in practically every category of economic activity.

In 1952, total business volume for Texas was almost as much in dollars and cents as the entire business volume of the South in 1939.

Total business volume in the South was almost as much in 1952 as the entire volume for the United States in 1939.

Of course, the two last observations constitute a commentary on the inflation that has taken place as well as upon rates of industrial growth, but the inescapable conclusion persists that economic growth in all sections of the Nation, and in all divisions of industry has been phenomenal during the past decade.

Of total dollar gain since 1939, 122 per cent must be entered under the heading "inflation," but all remaining percentage gain represents actual growth.

Thus, it can be seen that Texas has had an actual growth of nearly 300 per cent. The South's growth has

approximated 240 per cent, and the growth made by the United States has totaled somewhat less than 200 per cent.

One of the most important qualities of Texas industry is its diversity.

Once a land of cattle and crops, the Lone Star State has developed to a stage where every division of industry now occupies a position of significance.

This is especially true of mining since Texas has become universally known as the leading mineral state of the United States, due chiefly, but not entirely, to the huge quantities of petroleum products extracted each year.

But, in addition to mining, Texas is a leader in agriculture, construction, manufacturing, utilities, finance, and trade of all types.

The ensuing table pictures these various activities as they are currently being performed:

Business Volume

1952

Industry	*Active Establishments (000)*	*Persons Engaged (000)*	*Income from Payrolls & Profits ($ Mil.)*	*Output ($ Mil.)*
Farming	331.5	644	$ 1,189	$ 2,291
Other Rural	.8	18	25	37
Mining	3.9	125	1,455	3,219
Raw Materials	**336.2**	**787**	**$ 2,669**	**$ 5,547**
Construction	20.9	242	988	2,067
Manufacturing	10.4	428	2,853	10,047
Processing	**31.3**	**670**	**$ 3,841**	**$12,114**
Utilities	9.8	257	1,213	1,989
Finance	13.0	112	642	1,420
Supplementary	**22.8**	**369**	**$ 1,855**	**$ 3,409**
Wholesale Trade	10.5	131	700	9,339
Retail Trade	90.2	550	2,127	9,129
Service Trades	53.7	326	890	1,489
Distributive	**154.4**	**1,007**	**$ 3,717**	**$19,957**
All Enterprise	**544.7**	**2,833**	**$12,082**	**$41,027**

The strength and scope of Texas markets is attested by a wealth of statistical data, of which the foregoing is only a portion; yet what has been presented is so convincing as to need little further substantiation.

It is important, however, to know how market opportunities are distributed throughout the state, and thereby to be able to evaluate these markets from both an intrastate and interstate standpoint.

As already noted, the State possesses 30 important urban centers, and these are distributed in exceedingly strategic array throughout the 267,000 square miles which fall within the boundaries of the State.

The two tables which follow show these centers of business activity in their double role: first as producers of business volume from which income flows, and secondly, as spenders of this income, making them important from the marketeer's viewpoint.

In addition to the foregoing urban and metropolitan centers, each of which has upward of 20,000 population, a myriad of smaller marts lie scattered far and wide throughout the State.

With population between 5,000 and 20,000 are the following towns and cities: (counties in which they lie are in parenthesis):

Lufkin (Angelina); Beeville (Bee); Belton, Killeen (Bell); Freeport (Brazoria); Bryan, College Station (Brazos); Alpine (Brewster); Falfurrias (Brooks); Lockhart, Luling (Caldwell); Port Lavaca (Calhoun); Rusk, Jacksonville (Cherokee); Childress (Childress); Coleman (Coleman); New Braunfels (Comal); Gaines-

Urban Business Volume—1952

($ Million)

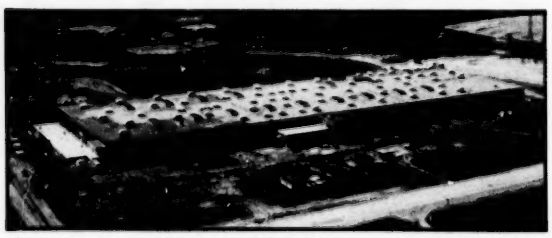
Urban Area *City*	*County*	*Manufacturing*	*Trade*	*Service*	*All Other*	*Business Volume*
Houston	Harris	$ 2,148	$ 3,147	$ 245	$ 1,974	$ 7,514
Dallas	Dallas	1,070	3,498	247	1,528	6,343
Fort Worth	Tarrant	910	1,336	108	590	2,944
Beaumont-Port Arthur	Jefferson	1,462	407	41	316	2,226
San Antonio	Bexar	294	1,112	128	449	1,983
El Paso	El Paso	545	476	41	198	1,260
Galveston	Galveston	754	234	38	172	1,198
Corpus Christi	Nueces	274	359	39	305	977
Amarillo	Potter-Randall	76	446	30	144	696
Wichita Falls	Wichita	112	221	29	311	673
Lubbock	Lubbock	55	373	27	133	588
Waco	McLennan	128	318	24	109	579
Austin	Travis	37	283	34	132	486
McAllen	Hidalgo	49	249	19	125	442
Sherman	Grayson	181	129	11	69	390
Tyler	Smith	63	143	13	144	363
Brownsville-Harlingen	Cameron	54	204	20	72	350
Longview	Gregg	61	164	16	82	323
San Angelo	Tom Green	16	173	12	60	261
Abilene	Taylor	24	178	12	46	260
Odessa	Ector	13	149	11	48	221
Texarkana	Bowie	33	91	6	26	156
Orange	Orange	83	47	4	21	155
Temple	Bell	14	85	10	33	142
Laredo	Webb	10	83	5	41	139
Paris	Lamar	23	59	4	29	115
Marshall	Harrison	32	49	5	23	109
Denton	Denton	23	53	5	27	108
Brownwood	Brown	8	51	4	21	84
Midland	Midland	2	58	4	15	79
All Metropolitan		$ 8,554	$14,175	$1,192	$ 7,243	$31,164
All Other		$ 1,493	$ 4,293	$ 297	$ 3,780	$ 9,863
Texas		$10,047	$18,468	$1,489	$11,023	$41,027

Urban Income and Expenditure—1952

($ Million)

Urban Area: City	Urban Area: County	Population (000)	Total Income ($ Mil.)	Per Capita Income	Consumer Sales ($ Mil.)	Per Capita Consumer Sales
Houston	Harris	888	$ 2,092	$2,356	$ 1,469	$1,654
Dallas	Dallas	676	1,595	2,360	1,368	2,024
Fort Worth	Tarrant	391	788	2,015	674	1,724
Beaumont-Arthur	Jefferson	215	661	3,074	310	1,442
San Antonio	Bexar	549	543	989	658	1,199
El Paso	El Paso	219	352	1,607	264	1,205
Galveston	Galveston	124	361	2,911	206	1,661
Corpus Christi	Nueces	182	307	1,687	241	1,324
Amarillo	Potter-Randall	96	173	1,802	189	1,969
Wichita Falls	Wichita	108	226	2,093	148	1,370
Lubbock	Lubbock	111	155	1,396	184	1,658
Waco	McLennan	142	155	1,092	179	1,261
Austin	Travis	177	172	972	223	1,260
McAllen	Hidalgo	177	128	723	135	763
Sherman	Grayson	78	115	1,474	85	1,090
Tyler	Smith	82	118	1,439	97	1,183
Brownsville-Harlingen	Cameron	138	100	725	124	899
Longview	Gregg	67	93	1,388	108	1,612
San Angelo	Tom Green	65	72	1,108	99	1,523
Abilene	Taylor	70	67	957	102	1,457
Odessa	Ector	46	55	1,196	64	1,391
Texarkana	Bowie	68	42	618	53	779
Orange	Orange	44	48	1,091	39	886
Temple	Bell	82	44	537	66	805
Laredo	Webb	62	43	694	60	968
Paris	Lamar	48	34	708	42	875
Marshall	Harrison	53	36	679	43	811
Denton	Denton	46	36	783	44	957
Brownwood	Brown	32	23	719	33	1,031
Midland	Midland	28	18	643	35	1,250
All Metropolitan		5,064	$ 8,652	$1,709	$ 7,342	$1,450
All Other		3,064	$ 3,554	$1,160	$ 3,277	$1,070
Texas		8,128	$12,206	$1,502	$10,619	$1,306

ville (Cooke); Dalhart (Dallam); Lamesa (Dawson); Hereford (Deaf Smith); Cuero (DeWitt); Carrizo Springs (Dimmit); Cisco (Eastland); Ennis (Ellis); Stephenville (Erath); Marlin (Falls); Bonham (Fannin); Rosenberg (Fort Bend); Gonzales (Gonzales); Pampa (Gray); Denison (Grayson); Gladewater, Kilgore (Gregg); Navasota (Grimes); Seguin (Guadalupe); Plainview (Hale); Quanah (Hardeman); San Marcos (Hays); Athens (Henderson); Donna, Edinburgh, Mercedes, Mission, Pharr, Weslaco (Hidalgo); Hillsboro (Hill); Levelland (Hockley); Sulphur Springs (Hopkins); Crockett (Houston); Big Spring (Howard); Commerce, Greenville (Hunt); Borger (Hutchinson); Jasper (Jasper); Alice (Jim Wells); Cleburne (Johnson); Stamford (Jones); Terrell (Kaufman); Kerrville (Kerr); Kingsville (Kleberg); Littlefield (Lamb); Lampasas (Lampasas); Cotulla (La Salle); Cleveland (Liberty); Mexia (Limestone); Slayton (Lubbock); Brady (McCulloch); Bay (Matagorda); Eagle Pass (Maverick); Cameron (Milam); Colorado City (Mitchell); Bowie (Montague); Conroe (Montgomery); Dumas (Moore); Nacogdoches (Nacogdoches); Corsicana (Navarro); Sweetwater (Nolan); Mineral Wells (Palo Pinto); Carthage (Panola); Weatherford (Parker); Fort Stockton (Pecos); Pecos (Reeves); Refugio (Refugio); Hearne (Robertson); Ballinger (Runnels); Henderson (Rusk); Aransas Pass (San Patricio); Snyder (Scurry); Breckenridge (Stephens); Brownfield (Terry); Mount Pleasant (Titus); Uvalde (Uvalde); Del Rio (Val Verde); Victoria (Victoria); Huntsville (Walker); Monahans (Ward); Brenham (Washington); El Campo, Wharton (Wharton); Vernon (Wilbarger); Raymondville (Willacy); Georgetown, Taylor (Williamson); Kermit (Winkler); Graham (Young); Crystal City (Zavala).



Fort Worth is the home of Chicago Pneumatic Tool Company's new $4.5 million oil tool division plant.

Returning for a moment to the two foregoing tables it will be noted that the thirty principal urban centers of the State account for 75 per cent of total business volume, 70 per cent of accrued income, and 69 per cent of all consumer expenditures.

Attention of marketeers will naturally be concentrated chiefly on these easy-to-reach sales centers.

The remainder of the State is by no means, however, to be considered ignorable.

The remaining 25 per cent of business volume amounts to nearly $10 billion, with accrued income of $3.5 billion and consumer sales of $3.3 billion. This in itself is a market which a number of states would be glad to possess.

Most of this remaining portion of the Texas market is to be found within the trading areas of the towns and cities, above listed, which are in addition to the 30 major trading centers.

Listing and cataloging of these smaller centers, if not already done, will prove one of the most profitable

procedures that could be adopted for the purpose of taking on additional sales territory.

Lastly, lying outside and around these 30 larger and 107 smaller trading centers are a vast number of budding industrial hamlets that are well worth cultivating for their future potentialities.

It would be impractical in the space now available to attempt to make a detailed listing of such places.

It may, however, be helpful to present the following table which shows the State of Texas broken down into its 15 rural and 8 metropolitan areas, as designed by the U. S. Bureau of the Census.

These 23 divisions of the State, designated by the Census Bureau as "State Economic Areas," are described by the Bureau as "relatively Homogeneous subdivisions of the States. They consist of single counties or groups of counties which have similar economic and social characteristics. The boundaries of these areas have been drawn in such a way that each state is subdivided into a few parts, with each part having certain significant characteristics which distinguish it . . ."

Along with tabulated economic data applying to the economic areas of Texas is herewith presented also a listing of the counties which make up the various areas.

Area 1: Brewster, Culberson, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Ward, Crockett, Edwards, Glasscock, Irion, Kimble, Kinney, Menard, Reagan, Real, Schleicher, Sterling, Sutton, Terrell, Upton, Uvalde, Val Verde—25;

Area 2: Bandera, Blanco, Coke, Comal, Concho, Gillespie, Hays, Kendall, Kerr, Llano, McCulloch, Mason, Medina, San Saba, Tom Green—15;

Area 3: Brooks, Dimmit, Duval, Jim Hogg, Kenedy, Kleberg, La Salle, McMullen, Maverick, Starr, Webb, Zapata, Zavala—13;

Area 4: Armstrong, Briscoe, Carson, Castro, Dallam, Deaf Smith, Floyd, Gray, Hale, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher—23;

Area 5: Andrews, Bailey, Cochran, Crane, Crosby, Dawson, Ector, Gaines, Hockley, Howard, Lamb, Lubbock, Lynn, Martin, Midland, Terry, Winkler, Yoakum —18;

Area 6: Baylor, Borden, Brown, Childress, Coleman, Collingsworth, Cottle, Dickens, Donley, Fisher, Foard, Garza, Hall, Hardeman, Haskell, Jones, Kent, King, Mitchell, Motley, Nolan, Runnels, Scurry, Stonewall, Taylor, Wheeler, Wichita, Wilbarger, Archer, Callahan, Clay, Shackleford, Stephens, Throckmorton, Young—35;

Area 7: Comanche, Eastland, Erath, Hood, Jack, Montague, Palo Pinto, Parker, Somervell, Wise, Cooke, Denton, Johnson, Bosque, Burnet, Coryell, Hamilton, Lampasas, Mills—19;

Area 8: Bell, Collin, Delta, Ellis, Falls, Fannin, Grayson, Hill, Hunt, Kaufman, Lamar, Limestone, Milan, Navarro, Rockwall, Williamson—16;

Area 9: Bastrop, Brazos, Burleson, Freestone, Grimes, Lee, Leon, Madison, Robertson—9;

Area 10: Caldwell, Fayette, Gonzales, Guadalupe, Lavaca, Washington—6;

Area 11: Arkansas, Atascosa, Bee, DeWitt, Frio, Goliad, Jim Wells, Karnes, Live Oak, Nueces, Refugio, Wilson—12;

Area 12: Anderson, Bowie, Camp, Cass, Cherokee, Franklin, Gregg, Harrison, Henderson, Hopkins, Houston, Marion, Morris, Nacogdoches, Panola, Rains, Red River, Rusk, Shelby, Smith, Titus, Upsur, Van Zandt, Wood—24;

Area 13: Angelina, Hardin, Jasper, Montgomery, Newton, Polk, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker—12;

Area 14: Austin, Brazoria, Calhoun, Chambers, Colorado, Fort Bend, Galveston, Jackson, Liberty, Matagorda, Orange, Victoria, Waller, Wharton—14;

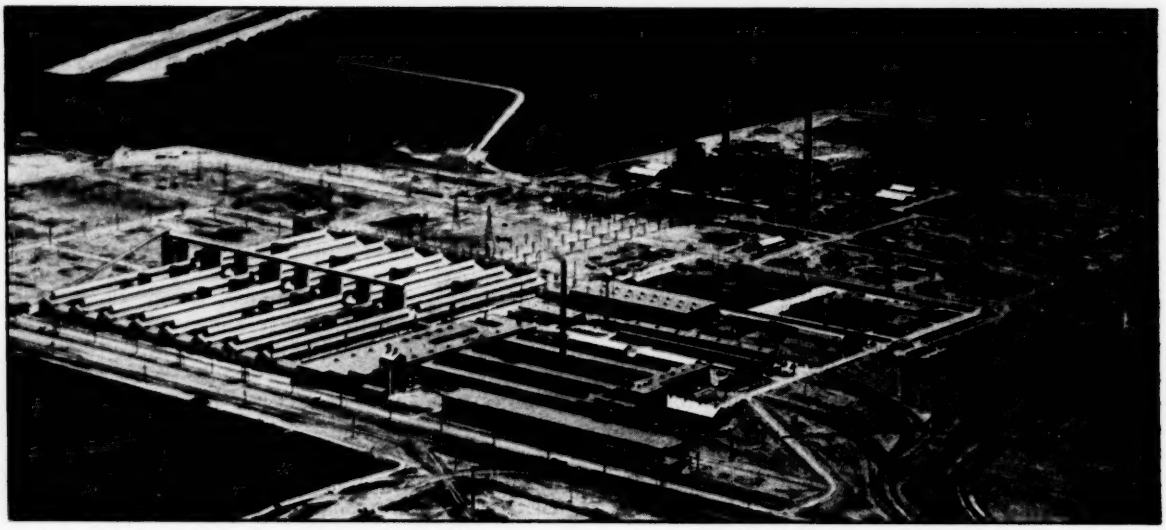
Area 15: Cameron, Hidalgo, Willacy—3;

Area A: El Paso; Area B: Tarrant; Area C: Dallas; Area D: McLennan; Area E: Travis; Area F: Bexar; Area G: Harris; Area H: Jefferson.

Economic Area Business Volume—1952

Sales or Receipts—($ Million)

Area	*Counties*	*Population (000)*	*Farming & Rural*	*Mining & Extracting*	*Construction*	*Manufacturing*	*Utilities*	*Finance*	*Wholesale Trade*	*Retail Trade*	*Services, Professions*	*Business Volume*
1	25	132	$117	$187	$ 16	$ 16	$ 28	$ 14	$ 51	$152	$ 13	$594
2	15	193	92	14	30	46	31	25	126	227	24	615
3	13	175	51	88	15	15	17	7	49	142	13	397
4	23	276	327	117	111	669	72	29	465	424	53	2,267
5	18	354	195	190	77	101	68	28	419	476	63	1,617
6	36	535	293	355	90	256	85	49	353	610	79	2,170
7	19	306	206	52	38	65	26	18	93	304	30	832
8	16	596	243	30	82	357	58	37	251	537	64	1,659
9	9	150	48	13	14	22	7	7	31	128	13	283
10	6	131	70	6	17	43	7	6	63	131	13	356
11	13	376	119	161	69	311	94	35	255	379	57	1,480
12	24	689	158	221	90	328	60	46	265	610	73	1,851
13	12	191	30	32	25	175	10	8	45	156	15	496
14	14	431	127	187	105	940	94	51	169	497	71	2,241
15	3	336	101	17	45	109	22	17	228	255	40	834
A	1	219	22	4	70	545	78	24	252	224	41	1,260
B	1	391	19	157	161	910	139	114	771	565	108	2,944
C	1	676	21	351	358	1,070	398	400	2,499	999	247	6,343
D	1	142	18	5	33	128	32	21	158	160	24	579
E	1	177	13	32	25	37	22	40	89	194	34	486
F	1	549	20	114	107	294	106	102	566	546	128	1,983
G	1	888	23	815	375	2,148	447	314	2,005	1,142	245	7,514
H	1	215	15	71	114	1,462	88	28	136	271	41	2,226
Tex.	253	8,128	$2,328	$3,219	$2,067	$10,047	$1,989	$1,420	$9,339	$9,129	$1,489	$41,027



Aeriel view showing Aluminum Company of America's Roakdale Works. Aluminum producing facilities, shown in left foreground, will have a capacity to produce 170,000,000 pounds of aluminum annually. Electric power, required in large quantities, will be generated in the power plant shown near the two stacks.

MANUFACTURING

EVEN those who are familiar with industrial growth in Texas rarely appreciate fully the spectacular nature of this growth.

The following tabulations illustrate:

All Manufacturing
$ million

Region	*1900*	*1939*	*1952*
Texas	$ 119	$ 1,530	$ 10,047
South	1,861	11,190	56,405
U. S.	13,010	56,843	256,056

Percentage Gain in Manufacturing

Region	*1900-1939*	*1900-1952*	*1939-1952*
Texas	1,186	8,342	556
South	501	2,931	404
U. S.	337	1,868	350

Two important points are to be derived from the foregoing comparisons:

Texas has achieved greater gains than either its own region as a whole or its nation as a whole, in all periods of history that might be chosen for comparative purpose;

Texas is continuing now to maintain this same leadership with respect to growth.

Both considerations are important.

The first shows that industrial growth in Texas has been steady and unceasing, a quality of growth that can be claimed by few, if any, other states.

The second shows conclusively that initial and early growth does not represent a flash in the pan, but rather that there are underlying resources that assume methodical growth for as far in the future as man's imagination may safely range.

This second conclusion also makes easier complete analysis of the State's industrial economics since it permits the use of recent statistics to support growth data; and statistics improve in reliability as they advance in recency.

For the purpose at hand—to display at one time the current status of manufacturing and current rate of growth—the years 1949 and 1952 will be taken as criteria.

The period embraced inclusively is one of intensive growth for all elements of United States industry and for all regions within the United States, and it is readily apparent from even cursory examination that Texas has been in the forefront of this phenomenal growth.

Starting with Manufacturing in its entirety, it can be seen from the ensuing tabulation that Texas has continued in this most recent period to carry forward the leadership established in earlier years:

All Manufacturing—1952

Region	*Active Plants (000)*	*Persons Engaged (000)*	*Industry Income $ mil.*	*Output Value $ mil.*	*Gain Over 1949 %*
Texas	10.4	428	2,853	10,047	68
South	78.7	3,707	16,982	56,405	45
U. S.	312.8	16,844	91,151	256,056	36

Texas manufacturing, for the past three years, has been virtually spinning across the industrial horizon, at a clip 50 per cent faster than that of the South, and almost twice as fast as that of the United States.

Further important connotation can be derived from the next two tabulations which break Manufacturing down into its two major components—Durable Goods and Nondurable Goods:

Durable Goods Manufacturing—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	4.9	201	1,063	2,569	83
South	44.0	1,494	6,147	15,253	44
U. S.	157.9	9,464	51,635	121,167	42

Nondurable Goods Manufacturing—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	5.5	227	1,791	7,478	64
South	34.7	2,213	10,834	41,152	46
U. S.	154.9	7,380	40,516	134,883	31

With respect to Durables and Nondurables the South shows best progress in the latter, a traditional condition that has served the Region well in the development of natural resources, but at the same time has retarded diversification to a marked degree.

Growth in the United States under current conditions leans strongly in the direction of Durable Goods. Most military accouterments fall within this category, and the present is a time when military requirements represent a major activating force upon industrial expansion.

Texas, it will be noted, has broken with its Region in this one respect and not only follows the trend established by the Nation but even goes the Nation some better, increasing output of Durables by 83 per cent against the National average of 42 per cent.

In a later tabulation it will be seen that a substantial part of this growth settles in the Aircraft division of Transportation Equipment, but for the present, orderly procedure will best result by taking up the manufacturing groups, one by one, in the order in which they are officially classified.

First in the list of Durable Goods is:

Lumber Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	1.7	31	135	250	35
South	27.2	375	1,109	2,591	39
U. S.	51.7	825	3,320	6,924	44

Most observers are apt to think of Texas as a region of wide open spaces with little timber or foliage.

While this is largely true of certain sections, there are others that exuberate with luxuriant growth.

Large areas of the latter are concentrated in the eastern section of the State, and it is there that the substantial lumbering industry of Texas finds its main volume.

Blast furnace tower of Lone Star Steel at Daingerfield. More than $100,100,000 is invested in this plant, supplied by Texas ore and fuel.

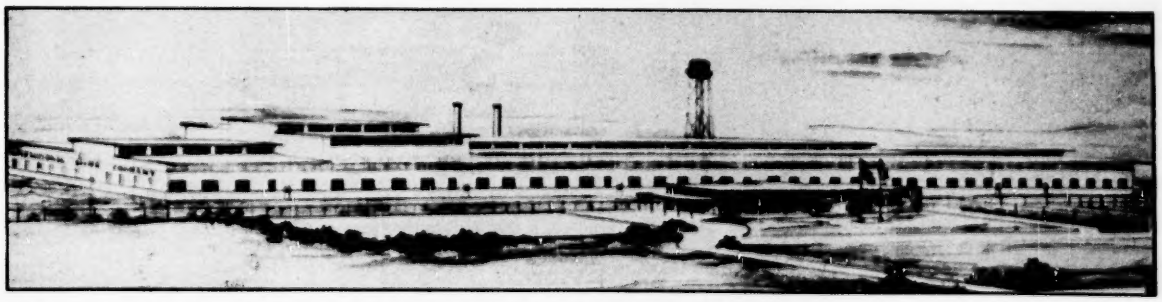
It will doubtless be surprising to many that Texas ranks third among Southern states in lumber production, and sixth among the states of the Nation.

In the second category of Durable Goods—Furniture Manufacturing—the share is more modest as may be noted from the following:

Furniture Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	11	46	109	108
South	2.5	124	394	1,061	62
U. S.	10.5	379	1,734	3,786	30

Although volume in furniture manufacturing is still small considerable expansion is taking place in this industry, and growth is substantially ahead of that for the South or for the United States as a whole. This industry has practically doubled dollar value of output between 1949 and 1952, but in this connection it



Sketch of new plant for International Shoe Co. now under construction at Bryan. Synthetic rubber will be supplied by Texas plants.

must always be borne in mind that some 15 per cent must be deducted from industrial percentage gains by reason of price inflation.

Next comes products of the Stone-Clay-Glass division of Manufacturing:

Stone-Clay-Glass Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	15	88	181	105
South	3.3	142	597	1,291	65
U. S.	11.4	573	3,298	6,241	48

In output of the foregoing products, great progress is being achieved.

By far the major portion of output consists of hydraulic cement which is being turned out in large volume by a dozen large plants, each employing upwards of 100 workers.

Gypsum products turned out by a half dozen voluminous plants take second place, rivaled sharply by plants turning out concrete products. These last are somewhat smaller in size and greater in number—221 in all.

These are the major stone-clay-glass products but not the only ones. Also turned out in considerable volume are glass containers, building products such as brick and tile, and asbestos products.

Manufacture for the entire group has practically doubled in dollar value since 1949.

Next in order comes an industry that is relatively new to large sections of the South, but one that has taken hold strongly during and since the last war.

Primary Metals Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.1	20	203	466	28
South	1.0	193	1,175	3,422	16
U. S.	6.5	1,370	7,259	22,584	33

In Primary Metals Texas has bettered the record of the South, but along with most of its sister states in the Region has lagged behind the National rate of growth.

Texas output is well diversified between iron and steel on the one hand, and nonferrous smelting on the other.

Further substantial growth in both directions is indicated for the future.

In Fabricated Metals, the next classified industry, Texas stands out in excellent relief:

Fabricated Metals Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	18	122	250	78
South	2.4	127	735	1,498	44
U. S.	18.9	1,070	6,001	12,164	29

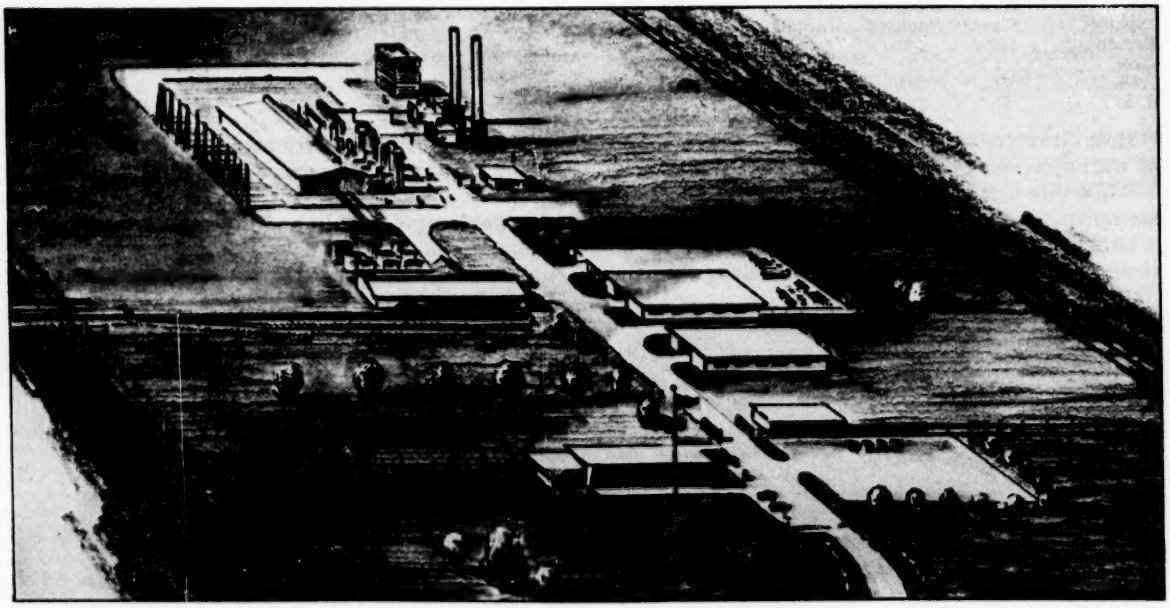
Rate of growth is considerably ahead of that of either Region or Nation, and the State is displaying exceptional expansion in two departments of Fabricated Metals manufacture.

These two are Ornamental Structural shapes and forms for the building trades, and Boiler Shop products for industry in general.

Ten large plants in the former category and seven in the latter, supplemented by over 180 smaller plants, account for 85 per cent of the industry's total dollar value of production.

The remaining 15 per cent consists of cutlery, tools, hardware, heating and plumbing equipment, stamping and polishing and finished wire products.

In Machinery, the next category, the State is doing better than the Region but hardly as well as the United States average:



New plant for Spencer Chemical Co. at Orange. In this vicinity more than one half billion dollars is being spent in new chemical plants.

Machinery Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.7	35	241	413	38
South	2.8	148	816	1,386	28
U. S.	22.2	1,721	11,164	21,735	55

Farm equipment and oil drilling rigs constitute the lion's share of this industry as might be expected, but growth that is now taking place is probably more rapid in the following less voluminous outputs: Cutting tools, jigs and fixtures, general industrial machinery, and service and home appliances.

As a whole the group has sustained a growth of little better than a third since 1949, including about 15 per cent due to increase of the price level.

In Electrical Machinery, Texas shows to much better advantage.

This is an industry in which progress has been rapid, both in the United States as a whole and in the South.

Expansion, on a percentage basis, has been about on a par in both. Texas, however, has been consistently exceeding gains made by both the South and United States, as may be seen from the following tabulation:

Electrical Machinery Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.1	3	10	22	83
South	.4	92	361	728	52
U. S.	5.4	1,058	6,066	12,710	53

By far the largest proportion of gain in Texas has been in output of storage batteries, but expansion is also taking place in a small way in Electrical Control Apparatus, and Communication Equipment.

When evaluating growth in this industry it is important to bear in mind that volume is still small in Texas as in most of the South, and percentage gains may appear misleading. In dollar value of output there is still room for wide expansion before either Texas or the South can be able to say they are reaping their full share.

A different story is observable, however, in the next official industry group—Transportation Equipment:

Transportation Equip. Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.2	62	199	822	260
South	1.3	240	771	2,804	100
U. S.	6.0	1,688	8,710	26,745	44

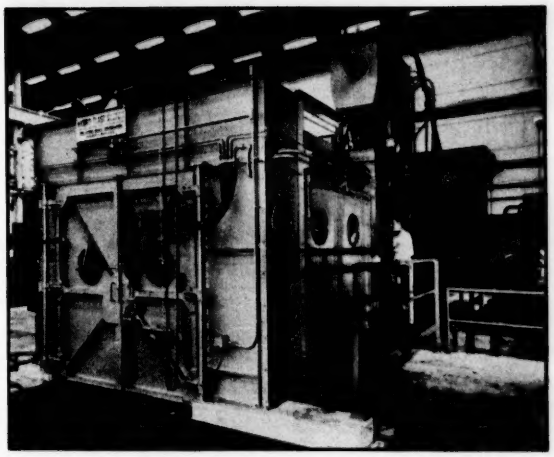
During World War II, Texas, along with other states in the South, was a prime producer of military and commercial aircraft.

With the cessation of hostilities, this industry receded rapidly from its thitherto high economic rank.

Although production during the war period was considerably beclouded by secrecy, it is estimated that production of aircraft in Texas in 1945 amounted to approximately $400 million in value.

In today's dollars that would be equivalent to almost $800 million.

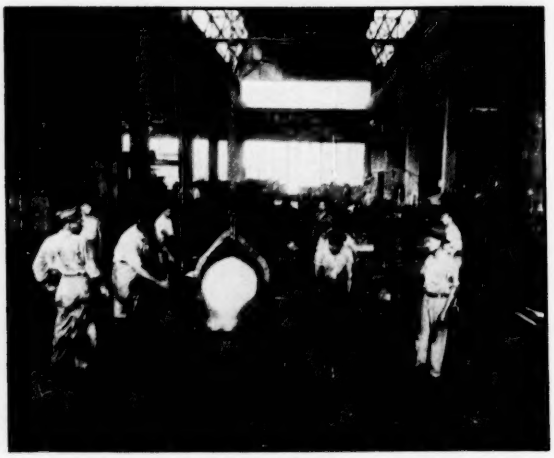
By 1949, production had tapered down to $228 million; and then, starting with hostilities in Korea, began a swift climb.



Hydro-blast cleaning installations at Ohmstede Machine Works, are used to clean the many heat exchangers used by the chemical industries along the Gulf Coast.

Steel drums made by United States Steel Products Co. at Beaumont, for shipment of oil refinery products.

New $7,000,000 plant of Texas City Chemicals, Inc., at Texas City.



Section of San Antonio Machine & Supply Co's. iron foundry.

One of the country's top builders of tugs and barges, Levington Shipbuilding Co. at Orange.

Production now is higher than ever, indicating that a major portion of the Nation's defense air arm is being molded in the reactivated plants of Texas. Growth of the industry there far outstrips that of the South or United States in entirety.

The two remaining Durable groups — Instruments, and Miscellaneous Manufacture—continue to be minor industries in Texas:

Instrument Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.1	2	4	14	100
South	.3	15	55	145	74
U. S.	3.7	309	1,566	2,958	34

Misc. Manufacturing—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	4	15	42	100
South	2.8	38	134	327	53
U. S.	21.6	471	2,517	5,320	44

Instruments manufactured in Texas consist of a fairly wide variety, taking in mechanical measuring devices of various types, medical instruments and equipment, and photographic equipment of fairly wide range.

And, the industry, although small in scope, practically doubled in dollar value between 1949 and 1952, indicating strong future potentiality.

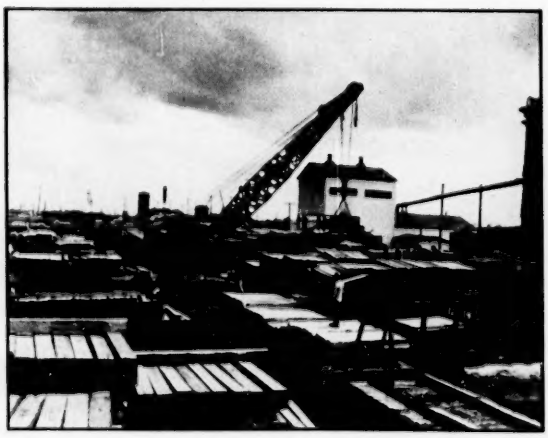
Among the miscellaneous manufactures made in Texas, advertising signs take first place, with real (precious stone) jewelry second. Fastest growing, however, is the division devoted to producing plastic articles and materials.

Great opportunity still exists in the Miscellaneous branch of Manufacturing, and this is true not only of Texas but of the entire South.

Returning now momentarily to the Nondurable Goods table at the beginning of the article, it will be remembered that both Texas and the South at large show to excellent advantage when compared with National averages. Here again, however, Texas is found to be far in the lead of its sister Southern states.

First in the classified list of Nondurables is Food Manufacturing, an enterprise important in all states, and Texas is no exception.

Food ranks second among all manufacturing groups in Texas, exceeded in dollar volume of products only



Creosoting ties and timbers at plant of Koppers Co. at Texarkana.

A portion of plant A of the Dow Chemical Co's. Texas Division at Freeport.

Unit crane of Eastern Iron & Metal Co. unloading steel plate at its Sherman warehouse.

by Petroleum-Coal Products in which Texas is a recognized National leader.

Food Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	2.2	66	389	2,136	70
South	12.5	436	2,160	10,865	42
U. S.	41.1	1,715	8,941	45,019	27

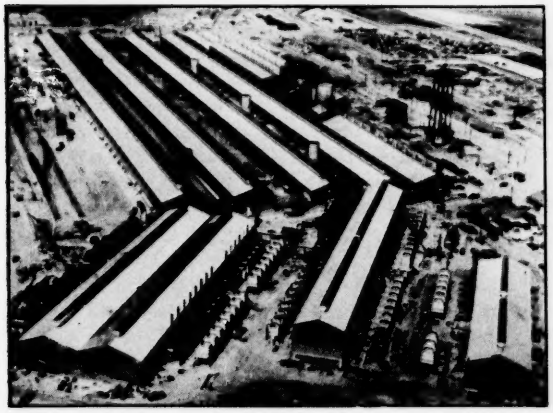
In dollar value of Manufactured Food, Texas ranks first in the South and fifth in the Nation, led only by New York, Pennsylvania, Illinois and California.

In recent growth Texas is ahead of all states, and far ahead of the Southern and National averages.

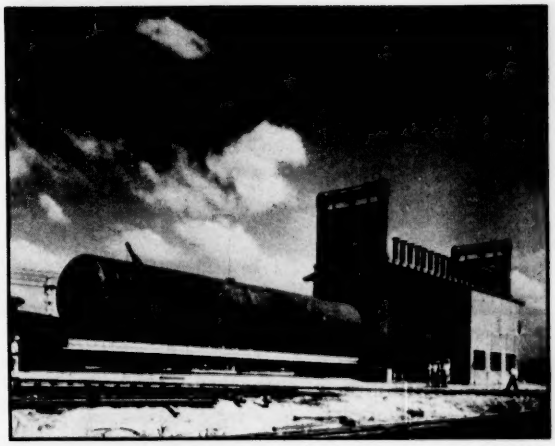
As might be expected from production of raw materials, principal components of the State's food output consist of meat and grain, and with respect to the latter Rice cleaning and polishing constitutes a major portion.

Also important are Dairy products, Canning, Bakery products and Beverages.

Next among classified industries comes Tobacco manufacture, and the State's output and rank is so low in this industry division, and rightfully so, that comment other than the following tabulation will be omitted.



Reduction plant of Reynolds Metals Co. at Corpus Christi has annual capacity of 150 million pounds.



I.D. Propane Pressure Vessel entering stress relieving furnace at Bethlehem Steel Co's. Beaumont Yard.

Tobacco Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	—	—	—	5	66
South	.4	96	360	3,204	75
U. S.	1.2	126	571	3,715	48

Textiles, next in order, and highly prominent in a number of Southern states are only nominally important in Texas:

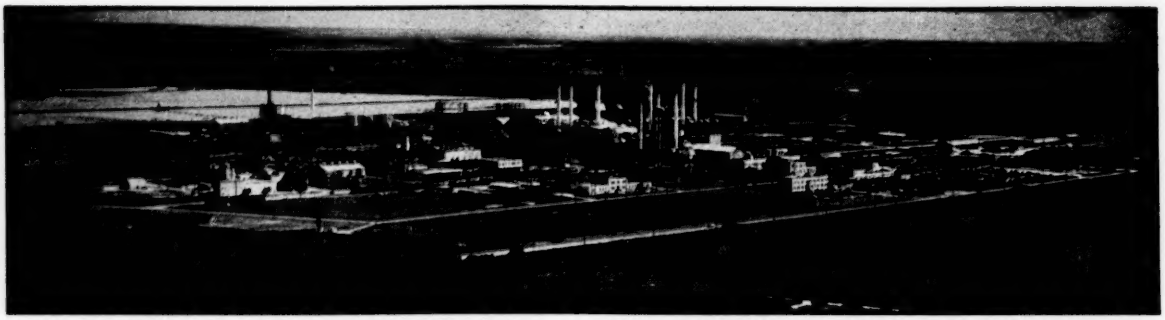
Textile Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.1	10	55	136	91
South	2.7	675	2,623	8,037	39
U. S.	10.3	1,263	6,114	14,035	35

Although low in output value, the Textile industry is expanding rapidly, and with the opening of several important woolen mills, may be expected to expand even more swiftly in coming years. Right now, cotton and rayon fabrics constitute 75 per cent of production.

The Apparel manufacturing industry, apparently at a standstill in the Nation, is displaying lively activity in Texas and other Southern states:

4,000 foot-long building of Consolidated Vultee Aircraft Corp. at Fort Worth.



Another of the big industries at Orange is DuPont's huge operation. Built in 1946, its facilities are already being expanded.

Apparel Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	28	87	325	108
South	3.5	281	774	2,472	52
U. S.	33.6	1,255	3,653	9,860	00

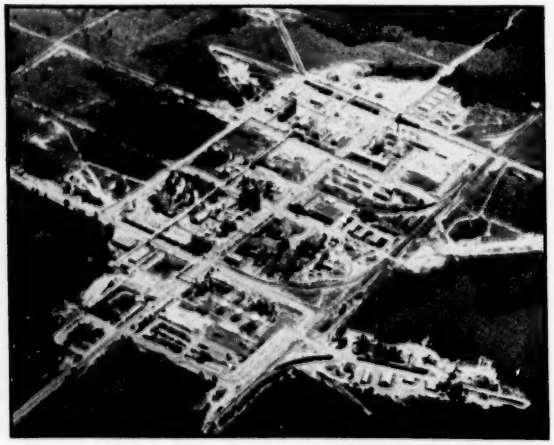
Men's and Boys' furnishings have traditionally made up the bulk of dollar value of production in Texas, but since the last war there is revealed a strong trend toward Women's and Children's apparel, and it is in this latter direction that growth is most rapid at present.

There are now twelve factories in the State employing upward of 100 employees, some of these with far upward of this number, devoted to production of Women's and Children's clothes and they are turning out products valued at nearly $80 million, representing a sizable gain over the $55 million of 1949.

When it comes to Pulp-Paper products, next on the list, Texas is found to be making exceptional progress. Among outstanding additions in recent years is an important newsprint mill, one of the few to be found in the South. Other important production occurs in the field of paper and cardboard containers.

Pulp-Paper Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.1	7	50	178	100
South	.9	127	754	2,355	47
U. S.	5.8	542	3,255	8,939	21



The Texas Eastman Plant at Longview.

In Printing & Publishing, next classified industry, the State continues its consistent record of outstanding growth:

Printing & Publishing—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	1.9	22	144	293	97
South	10.6	141	747	1,465	40
U. S.	41.8	789	4,475	8,315	24

Chief output (and also growth) in this industry is divided between Newspaper publishing and Commercial printing.

In both realms the State is far ahead of Regional and National growth. And, in addition possesses important segments of Periodical and Book publishing which substantially augment the dollar value of production.

Now come two industries that are very important insofar as comparison of Texas with other regions is concerned. These two are Chemicals and Petroleum-Coal Products.

Closely related as they are in Texas, these industries when combined form a total for Texas that is surpassed by only one or two single industries in other states. Taken separately, they stand as follows:

Chemical Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.5	42	401	1,166	81
South	3.2	277	1,915	6,014	41
U. S.	12.4	794	6,412	18,766	41

Texas ranks first among Southern states in value of Chemical products, and fifth in the Nation.

Principal products are Industrial chemicals, in the production of which 34 huge factories are now engaged.

Three of these plants are in Brazoria County, one is in Cameron County, one is in Carson County, two are in Dallas County, two are in Galveston County, ten are in Harris County, one in Harrison County, three in Hutchinson County, two in Jefferson County, one in McLennan County, one in Moore County, two in Nueces County, one in Orange County, three in Tarrant County, one in Van Zandt County.

In addition to these 34 large plants, over 400 small and medium size operations are at work turning out a wide variety of other types of chemical products such as drugs, soaps, paints, fertilizers and oils;

And now comes Texas' leading manufacturing industry:

Petroleum-Coal Products—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	.2	49	647	3,179	47
South	.4	95	1,142	5,521	41
U. S.	1.5	268	3,699	17,586	62

There is no question about Texas leadership in this manufacturing group. Among other states, only Pennsylvania and California come any where close and value of products in Texas is at least 25 per cent greater than in either of the other two, which by the way, are very close competitors, running neck and neck in output.

In Texas, as in California, by far the major portion of this industry consists of petroleum refining. In Pennsylvania a large segment is given over to production of Coke, to be used in that state's enormous steelmaking capacity.

In Texas, 42 enormous petroleum processing plants turn out products annually worth over $3 billion. In addition to these there are also a number of smaller plants devoted principally to production of paving and roofing materials.

Larger plants are located in the following counties:

Bexar, 1; Brazoria, 1; Dallas, 3; El Paso, 1; Galveston, 3; Harris, 7; Howard, 1; Hutchinson, 2; Jefferson, 9; Mitchell, 1; Morris, 1; Nolan, 1; Nueces, 2; Potter, 1; Tarrant, 6; Throckmorton, 1; Wichita, 1.

The two remaining manufacturing groups, Rubber and Leather, have, thus far, failed to attain major proportions in Texas.

Growth in both, however is at a record rate, surpassing South and Nation, and most other states as well. If present expansion continues unlessened, and there appears no reason why it should not, eventual importance awaits both industries.

Rubber Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	—	—	9	30	87
South	—	18	103	320	38
U. S.	1.4	257	2,212	5,425	93

Leather Manufacture—1952

Region	Active Plants (000)	Persons Engaged (000)	Industry Income $ mil.	Output Value $ mil.	Gain Over 1949 %
Texas	—	3	9	30	100
South	.6	67	256	899	41
U. S.	5.8	371	1,184	3,223	00

The foregoing completes the summarization of Texas Manufacturing, by industry groups.

As a whole, the summary discloses that manufacturing has embarked upon a course of widespread diversification, with emphasis perhaps on the metal industries. At the same time it is easily apparent that traditional industries such as Petroleum Products, Chemicals and Foods still rank first in the State's industrial economy, and are so firmly entrenched that it seems unlikely that they can ever be displaced by new types of industry—at least during the present generation.

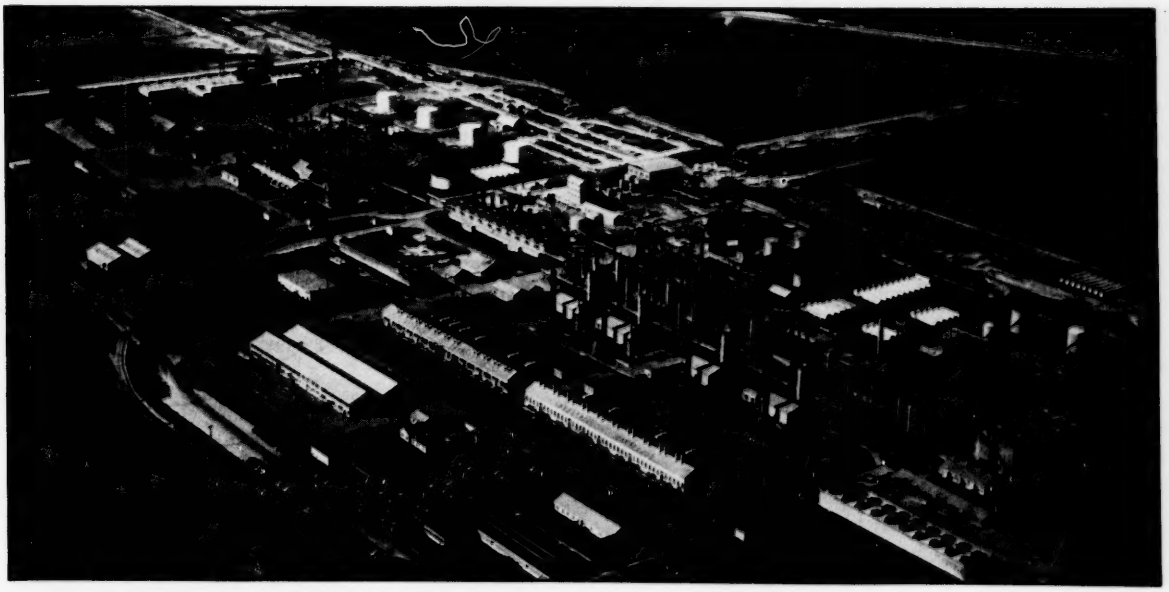
Thus far attention has been directed toward the State's manufacturing status vis-a-vis the South and the United States.

There are also a number of interesting considerations to be observed in relationships and distribution within the State itself.

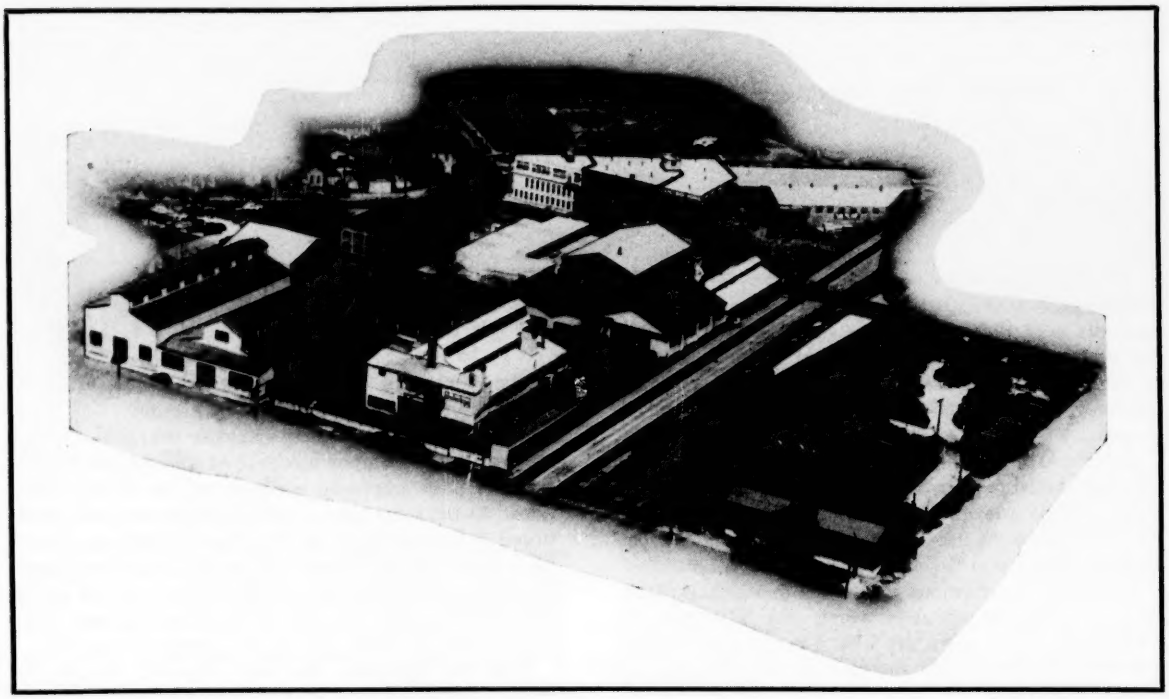
Most impressive of these considerations is, perhaps, the fact that 85 per cent of all manufacturing output takes place within the Metropolitan Areas of the State, these areas numbering thirty and taking in all cities with population of 20,000 or more persons.

The remaining 15 per cent is scattered between 107 smaller towns and a vast number of rural settlements.

Taking up the thirty metropolitan centers in order of their manufacturing output:



Plant of Celanese Corp. of America at Bishop produces a wide range of petro-chemicals from butane and propane.



San Antonio plant of Alamo Iron Works, which specializes in reinforcing and structural steel fabrication.

Houston—Harris County

This area is not only the manufacturing leader in Texas but is also one of the chief manufacturing centers in the South and in the United States.

Manufacturing accounts for 28 per cent of all business volume, and 43 per cent of the $2.1 billion of manufacturing output takes place within the municipal limits of the City itself.

Leading manufactures are Petroleum Products, Chemicals and Foods, followed by a list of other manufactures that is very widely diversified.

Beaumont-Port Arthur—Jefferson County

This two-city area has been one of the fastest growing communities of the entire United States.

Tremendous growth since prewar days is attributable in part to establishments of Gulf Texas Co., U. S. Steel Corp., Koppers Chemical Co., and Jefferson Chemical Co.

Of the $1.5 billion of annual manufacturing output, $63 million takes place within the city limits of Beaumont, $378 million within the city limits of Port Arthur, and the remainder in the county environs contiguous to the two cities.

Leading products are Chemicals, Petroleum Products and Transportation Equipment.

Dallas—Dallas County

An outstanding proportion of this Area's manufacturing output is to be found within the city limits of Dallas. The City itself accounts for 85 per cent of total area production.

Output for the Area totals annually $1.1 billion, for the City proper, $947 million.

Aircraft production is the leader, well supported by Metal Products and Food Products. Aside from aircraft, probably the most swiftly growing industry is manufacture of Apparel. This industry is growing very fast.

Fort Worth—Tarrant County

Very close neighbor of Dallas, with municipal limits almost within arms' reach, this Area is very similar to the one preceding.

Here again the City itself enjoys a preponderant proportion of community manufacturing, with about 90 per cent taking place within municipal limits.

Value of manufactured products for the Area in 1952 totaled $910 million; Fort Worth's share was $824 million.

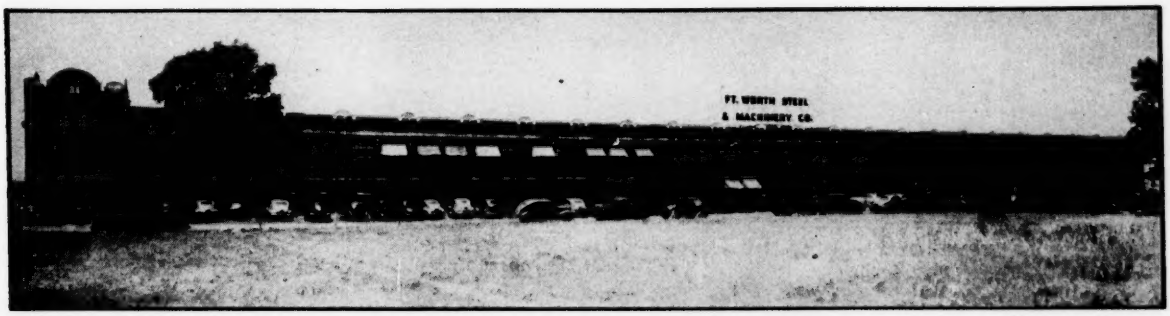
As in the case of Dallas, Aircraft is the Area's largest and most rapidly growing industry.

Galveston—Galveston County

Situated as it is, on an island, two miles off shore, the City of Galveston has relied chiefly on county territory for the building of its manufacturing realm.

Output value in 1952 totaled $754 for the Area, with $224 million within City limits.

Leading industries include Petroleum Products, Chemicals, Transportation Equipment, Metal Products, Food, Wood Products, Stone-Clay-Glass Products and Leather Products.



Fort Worth Steel and Machinery Company at Fort Worth, specializes in the manufacture of power transmission and conveyor equipment.

This Community prides itself chiefly upon recent growth of its Apparel manufacturing.

Other leading industries are Metal Products, Petroleum Products, Leather, Food, Stone-Clay-Glass, Wood Products and Chemicals.

Total value of manufacturing in 1952 for the Area was $545 million, of which the City proper enjoyed the large proportion of 81 per cent.

San Antonio—Bexar County

San Antonio is another city which has gone far toward concentrating industrial activity within municipal boundaries. The City's proportion of county manufacturing output is 91 per cent, the highest proportion for any Texas city of over 100,000 population.

Principal manufactured products of the Area are Food, Apparel, Stone-Clay-Glass, Metal Products, Wood Products, Leather Products, Chemicals, Pulp-Paper Products, Transportation Equipment, and Petroleum Products.

Area value of products in 1952 was $294 million, with $269 million taking place within city limits.

Corpus Christi—Nueces County

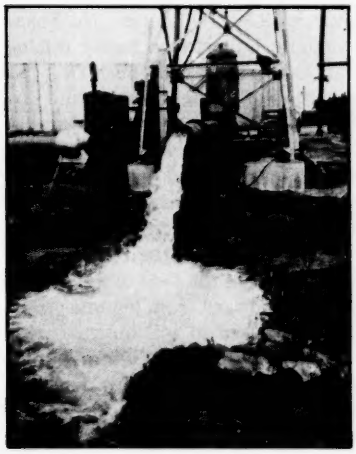
Leading products of this growing community are Chemicals, Pulp-Paper Products, Stone-Clay-Glass, and Food Products.

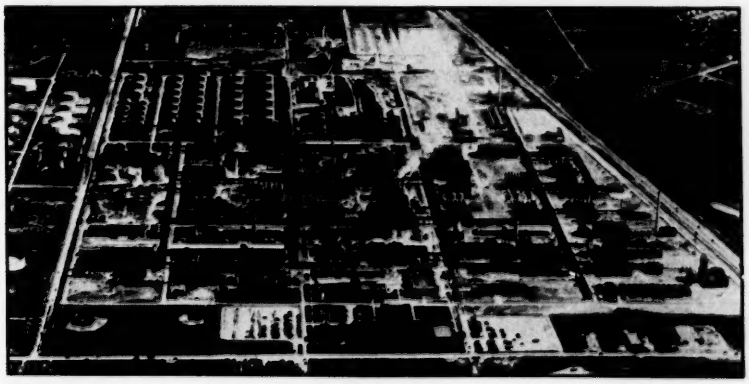
In 1952, dollar value of manufactured products totaled $274 million for the County, $164 million for the City.

The City's ratio to total County production is 60 per cent.

The eight foregoing areas are those in the State with annual manufacturing output of one hundred million dollars or more. The remaining metropolitan centers, 22 in all, are presented in tabular form, as follows:

City	*County*	*1952 Mfg. Output $ mil.*	*% in City Limits*
Sherman	Grayson	$181	43
Waco	McLennan	128	40
Wichita Falls	Wichita	112	81
Orange	Orange	83	85
Amarillo	Potter	76	80
Tyler	Smith	63	70
Longview	Gregg	61	16
Lubbock	Lubbock	55	74
Brownsville-Harlingen	Cameron	54	51
McAllen	Hidalgo	49	20
Austin	Travis	37	83
Texarkana	Bowie	33	51
Marshall	Harrison	32	59
Abilene	Taylor	24	91
Paris	Lamar	23	91
Denton	Denton	23	87
Temple	Bell	14	85
Odessa	Ector	13	92
Laredo	Webb	10	80
Brownwood	Brown	8	97
Midland	Midland	2	50





At left—Layne & Bowler pump installed at South Texas plant. Above—Synthetic organic chemicals are made from petroleum gases at plant of Carbide & Carbon Chemicals Co., a division of Union Carbide & Carbon Corp.

"King Cotton" grows in great profusion in the Rio Grande Valley. This land yields close to a bale and a half per acre.

AGRICULTURE

THE old quip, "If you don't like the weather, wait a few minutes," has taxed even the patience of many a Texan during the four years some of them have been waiting for enough continuous moisture to break the drouth. The dry weather has materially influenced the state's great agricultural industry but despite the drouth, production has been high.

The state produces and sells some 136 different crops. No other state has a wider range of climatic conditions nor a greater diversity of agricultural production. The growing season varies from 180 days in the upper part of the state to 320 or more in the lower Rio Grande Valley. Rainfall varies from near 60 inches annually on the Louisiana border to less than 10 inches in far West Texas. Texas leads the nation in cotton, grain sorghum and pecan production as well as in several minor crops.

The number of farms, shown by the 1950 Federal Census, was 331,567 and the farm population totaled 1,292,267. The total value of farms including land and buildings was $6,720,531,523, and all lands in farms totaled 145,389,014 acres for an average of 438.5 acres per farm. Crop land harvested was 28,107,865 acres although a total of 37,970,210 acres were available for crops.

The total value of crops produced in Texas in 1952 was $1,321,053,000. Cotton is the major cash crop for the state and the 1952 income from cotton and cottonseed totaled $778,741,000. The crop is produced in all except about 30 of the state's 254 counties. The heaviest producing area at present is centered around Lubbock on the South Plains. Production in this section, as is the case in others, is highly mechanized.

Despite one of the worst droughts in history, the 1953 crop production record is expected to be an impressive one. The cotton crop is now estimated at 4,050,000 bales. The per acre yield at 217 pounds which is far above the average of 170 pounds per acre for the period from 1939 to 1948. Other crop yields have been reduced as a result of the dry, hot weather but as has been the case in the past, some sections of the state always turn up with outstanding production records. It must be remembered that Texas includes approximately one-tenth of the land area of the continental United States. It is about equal in size to the combined areas of Alabama, Arkansas, Kentucky, Mississippi, South Carolina and Virginia. Brewster, its largest county, is about six times the size of Rhode Island. It is, therefore, seldom that a drought covers the entire state at the same time.

The Panhandle area produces approximately 70 per cent of the state's wheat. The hard winter type of wheat is produced and because of its quality most of it is used by commercial bakers. The average annual production, 1937-46, for the state was in excess of 45.6 million bushels. The 1947 crop totaled more than 124 million bushels and the 1952 crop 34,626,000 bushels.

Texas produces about one-half of the nation's grain sorghums. In 1952 the production reached 48,236,000 bushels and was grown on 2,682,000 acres. No Texas crop has risen in economic importance faster during the past 15 years than has grain sorghums. This has been due to the introduction of drought, insect and disease resistant and combine varieties, and its adaptability for industrial use. The Texas Agricultural Experiment Station has been responsible for the development of most improved varieties; the notable exception, Martin's milo. The crop is produced in every section of the state and in even more counties than is cotton.

Another major development in the field of agronomy is the production of forage and seed from legume crops. These crops are also widely used in soil improvement programs. In 1943 only 169,242 acres of winter legumes were plowed under while in 1950 the figure was just under two million acres. Dry weather has reduced plantings during the past three years. Seed produc-

tion in 1952 from vetch, alfalfa, crimson clover and sweetclover totaled approximately 21 million pounds. The yields of crops following fertilized legumes have generally been increased by varying amounts up to 50 per cent and too, the organic matter returned to the soil aids in making the soil more drouth resistant.

Rice is a major crop in Gulf Coastal Prairie section. The acreage for 1952 was 552,000 and the production reached 13,662,000 sacks of 100 pounds each. Rice driers and the use of combines for harvesting has revolutionized the rice growing industry.

Corn production is important especially in the Blackland area of the state. In 1952, 2,232,000 acres were harvested and the total production was 41,292,000 bushels. The use of corn hybrids has increased rapidly since the introduction of the first Texas corn hybrid in 1941. That year only about one per cent of the corn acreage was planted to hybrids, the total now is past 75 per cent. The use of Texas corn hybrids and fertilizers and legumes in rotation are helping to boost corn yields in the state.

Other crops that are of considerable economic importance to the state are oats, barley, rye, flax, hay, peanuts, broomcorn, roses and the fruit and vegetable crops. Texas ships from 50,000 to 80.000 carloads of fruit and vegetable crops each year. The principal producing areas are the Lower Rio Grande Valley, Winter Garden, East Texas and of late the South Plains. Principal crops are Irish potatoes, sweet potatoes, tomatoes, spinach, blackeye peas, cabbage, carrots, beans and peas, peppers, beets and lettuce. Vegetables were produced in 1952 from 352,000 acres.

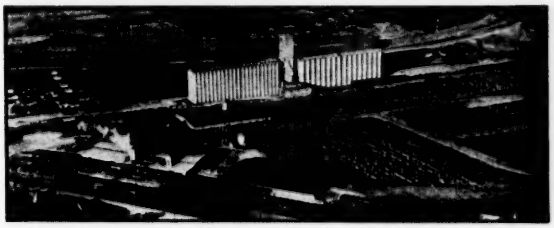
With the exception of citrus and pecans, Texas has not exploited its fruits and nut crop potential. Watermelon and cantaloupes are important crops in many areas of the state and shipments are made to all sections of the nation. The citrus crop has suffered heavily from disastrous freezes during the past winters, but new plantings are being made of the better varieties. Production will also be aided when irrigation improvements, now being made, are completed. These improvements include the supplying of additional water by the Falcon reservoir on the Rio Grande. Other fruits include peaches, apples, pears, grapes, plums and berries.

Nurserymen of East Texas propagate more than sixty per cent of the garden rose bushes produced in the United States today. Most of Texas' ten to twenty million plants are grown within a fifty-mile radius of Tyler.

Fifty years ago the total income from agriculture in Texas was little more than a quarter of a billion dollars, by 1949 it had reached almost 2½ billion dollars. During this same period, the nation's average production per farm worker has increased two and one-half times. How then have Texans been able to make this phenomenal increase?

The widespread use of machinery and the use of scientific information obtained from the results of work done by the Texas Agricultural Experiment Station and carried to every corner of the state by the Agricultural Extension Service workers in the form of demon-

Rice being harvested on the Texas Gulf Coast. Houston is the center of the rich rice belt.

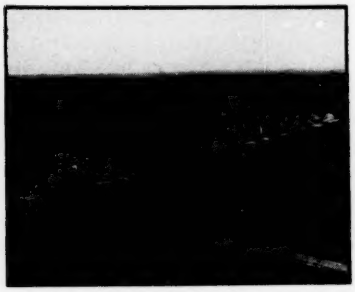


Producers Grain Corp. elevators in background, Farmers Co-op Compress, foreground.

Nursery of CO-Operative Rose Growers. Tyler is rose growing center of nation.

Rice on way to drier. Texas rice ranks high in quality.

Mechanical Cotton Harvester in West Texas.



Overhead irrigation. Water comes from Falcon Dam in Texas Valley.

strations have been the keys to this record of progress.

The demonstration method of teaching got its start in Texas when Dr. Seaman A. Knapp came to Kaufman county in 1903 and set up the first of his demonstrations to fight the boll weevil. The Experiment Station with its far-flung system of substations and field laboratories makes a special effort to keep in direct touch with problems that can only be solved through research. A recent example is the work done at the Spur Station on controlling mesquite or the new grain sorghum varieties developed at the Lubbock and Chillicothe Stations. Extension personnel carry the results of the research findings to the farm and ranch families of the state. Both of these great organizations are a part of the Texas A. and M. College System.

2,000,000 bushel grain elevator at port terminal at Corpus Christi.

Harvesting sweet onions in the Upper Rio Grande Valley, source of many fruits and vegetables.

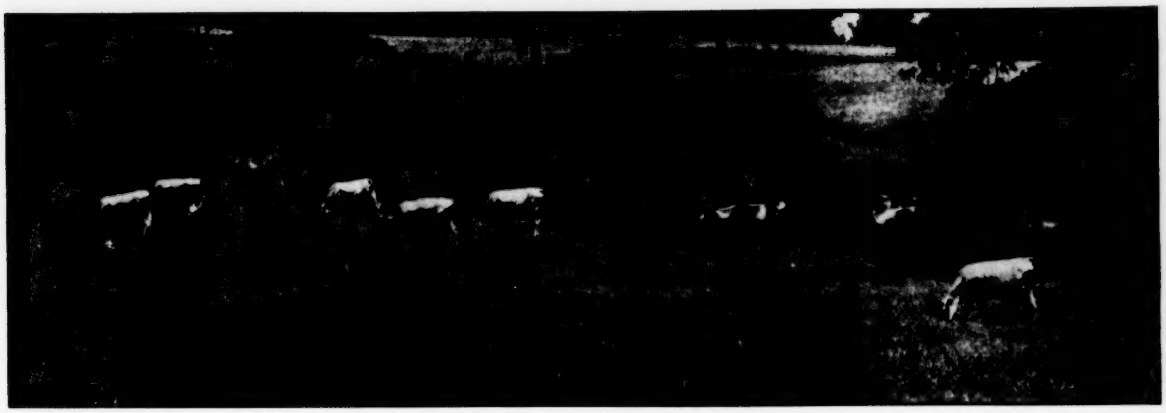
Irrigation has played a very important part in making possible higher yields and increased incomes. Some 4¼ million acres in the state are now irrigated. More than 28,000 irrigation wells provide water, most are in the South Plains and lower Panhandle counties, for cotton, grain, grain sorghum, wheat, alfalfa and pasture crops. More than 250,000 tractors provide the power needed to handle the equipment required for the agricultural production job in Texas.

The entomologists have contributed their share to the increased production. In 1952, 71,080,908 pounds of dust and 3,228,142 gallons of spray insecticides were used in the state in the fight against insects. More than four million acres of cotton were treated. An estimated saving to the cotton farmers of the state of $10,000,000 was the final result of this program. Similar insect control programs for other crops are also being conducted with good results.

The use of fertilizers has been another contributing factor to the increased production. Over 100 times as much anhydrous ammonia was sold this spring (1953) as in the same period of 1950. Sales of ammonium sulphate were six times greater than for the same period 3-years earlier. Sales of superphosphates were lower. During the first six months of 1953, 367,080 tons of all types of fertilizers were sold in the state.

The soils testing laboratory operated by the Extension Service is providing farmers and others with information that is helping them to solve many soils and fertilizer needs problems. During the past 12-months, some 8,000 soil samples have been analyzed and recommendations made.

The further application of research results to practical every day farming will make possible a continued progressive agricultural production for the state. Opportunities are many for those who are interested in becoming a part of the agricultural industry in Texas. Markets are expanding and processing plants are needed in many sections for the proper handling, processing and packaging of agricultural commodities. Such facilities will tend to make the industry even more stable and prosperous in the future.



Madisonville in the heart of East Texas is the center of the beef and dairy cattle industry. Great stress is put upon pasture improvement and a cow to the acre is not uncommon where better practices have been followed.

LIVESTOCK

LIVESTOCK and poultry numbers on Texas farms and ranches on January 1, 1953, according to estimates by the United States Department of Agriculture have been curtailed (some classes rather drastically) during the last two years as a result of the most severe drought within the memories of those engaged in livestock production in the State at this time. All cattle numbers remained the same as a year ago (1952) while turkeys increased 12 per cent. Other classes of livestock and poultry were down. Sheep numbers declined 10 per cent, goats 8 per cent, hogs 32 per cent. Chickens and horses declined 11 per cent, each, while mules were down 7 per cent from January 1952. The reduced numbers of livestock and poultry, with their much lower values per head lowered the total value of all livestock more than a third to $957,275,000 on January 1, 1953, from the $1,512,460,000 total value of one year ago. The year 1952, due largely to the drought, was a difficult one for a large number of the Texas livestock producers. Feed production over most of the state was very much reduced while in western and southern parts the ranges were almost devoid of grazing during most of 1952.

All cattle and calves on Texas farms and ranches, January 1, 1953, according to U.S.D.A. estimates numbered 8,853,000 head, the same as a year earlier and still 3 per cent above the 1942-51 average. Shortage of grazing during the late summer and fall (1952) forced drastic liquidation of cattle over the western half of Texas, much of such reduction, however, was offset by a further expansion of cattle in the eastern and southeastern portions of Texas. Total cows estimated at 4,954,000 head was 4 per cent higher than January 1, 1952 and only slightly below the record high of 5,018,000 cows on farms and ranches in January 1945. This larger number of cows reflects the greatly increased number of heifer calves retained on farms and ranches two years back, and which have now been moved into the breeding herds. Inventory value of all cattle on Texas farms and ranches was $832,182,000 or 36 per cent below the January 1, 1952 valuation. Average value per head (all cattle) on January 1, 1953, was $94, compared with $147 a year earlier and a $75.90 average of years 1942-51.

Milk cow numbers January 1, 1953, were estimated by the United States Department of Agriculture at 1,085,000 head, a three per cent increase over the previous year. Total farm milk income in Texas during 1951 was around $136,640,000.

Texas ranks 5th in dairy cattle numbers, being excelled in this respect by Wisconsin, Minnesota, New York, and Iowa. Major dairy cattle breeds in Texas are Jersey and Holsteins, with the former standing first in point of number. Holsteins, however, are increasing rapidly both in number and popularity. Other dairy breeds of importance in the state include the Guernsey, Brown-Swiss, Ayrshire, and milking Shorthorn.

Stock sheep numbers in Texas January 1, 1953, were estimated at 5,464,000 head or 10 per cent below the number on hand a year earlier. The marked decline in sheep numbers was due to the critical drought conditions over the Edwards Plateau and Trans-Pecos areas where most of the ranges failed to supply adequate grazing during a great portion of the last two years.

All stock sheep January 1, 1953 had a total value of $55,733,000 or less than half of the dollar value of a year earlier. The average value per head, January 1, 1953, was $10.20 compared with $18.60 one year previous and $10.40 for 1942-51 average.

The sheep range industry in Texas is concentrated largely in the Edwards Plateau and the Trans-Pecos areas where the fine wool breeds are predominant.

Texas range lambs are disposed of largely to feeders. Due to their hardness and excellent feeding qualities, the good to choice kinds are usually in extremely popular demand.

Wool production in Texas in 1952 was 46,277,000 pounds, unscoured basis with an average valuation of 58 cents per pound and a total of $26,841,000. For the year 1951 Texas production totaled 48,712,000 pounds, with an average selling value of 99 cents per pound grease basis. Average fleece weight 1952 was 7.7 pounds.

The leading counties in sheep numbers (1950 census) were: Val Verde, 600,885 head; Crockett, 448,715 head; Terrell, 347,695 head; and Pecos, with 341,659.

Texas goat numbers decreased 8 per cent in 1952 to 1,890,000 head, the lowest number since records were started by U.S.D.A. in 1920. This number compares with 2,054,000 head in Texas January 1, 1952, and the peak number of 3,465,000 head on hand ten years earlier. The major factor influencing the recent decline in goat numbers in Texas has been the severe drouth of 1951 and 1952. On January 1, 1953, Texas goats had a total value of $12,096,000, and a per head value of $6.40 compared to $8.60 one year previous.

Leading angora goat producing counties, 1950 census figures, were: Edwards 223,677 head; Val Verde 110,097; Kimble, 105,489; and Uvalde 100,124.

Mohair produced in Texas, 1952 totaled 11,561,000 pounds with an average value of 98 cents per pound. In 1951 production totaled 12,280,000 pounds which had an average selling value of $1.19 per pound. Average fleece weight 1952 was 5.3 pounds.

Hog production has been curtailed drastically in all parts of Texas during the past two years (1951-52) on account of the severe drought which has extended over a large portion of the state. Green forage and grain crops became drastically reduced during those two years. On January 1, 1953, hog numbers on Texas farms according to estimates by the U.S.D.A. were placed at 1,119,000 head. This figure was 32 per cent below the number reported one year earlier and 45 per cent below the 1942-51 average. The January 1, 1953, average per head value was $17.80 compared with $21.60 one year earlier, and $20.40 the previous 10 year average.

Texas ranked sixth, January 1, 1953, among all states, in all chickens with 20,455,000 birds. This figure was 11 per cent below that of one year earlier and about one third less than the 1942-51 average. The January 1, 1953, value of chickens on Texas farms was $22,500,000 as compared to $27,590,000 one year earlier.

Valuation per bird this year (January 1) was $1.10 as contrasted to $1.20 one year previous and $1.06 as the 1942-51 average.

According to the Agricultural Extension Service, income received from poultry and poultry products in Texas during 1951 was:

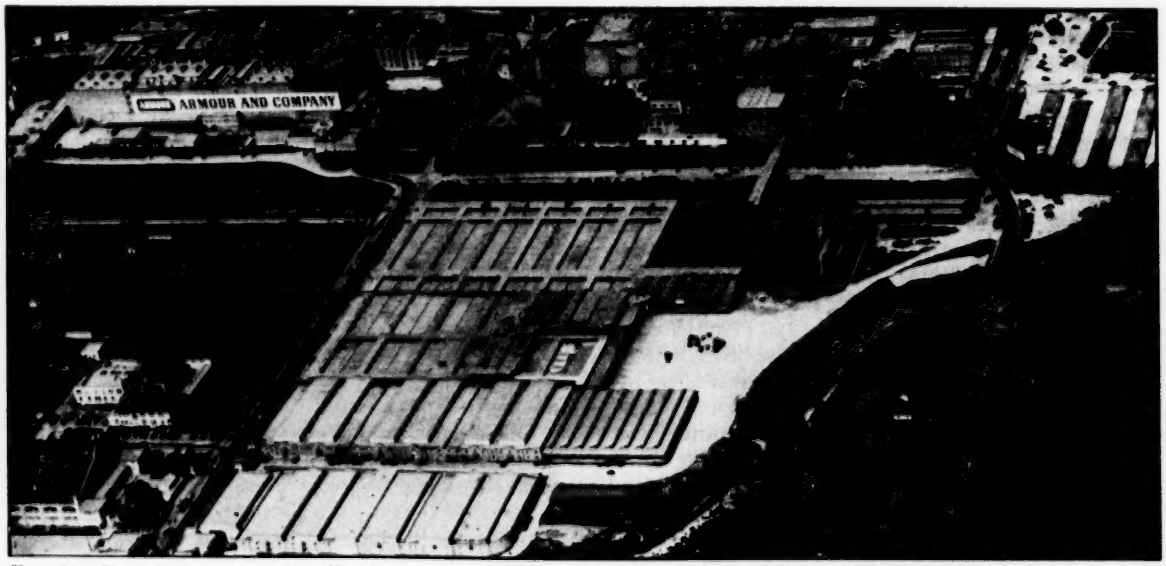
Eggs	$96,871,000	54.7 per cent of income
Broilers	42,343,000	23.9 " " " "
Turkeys	18,124,000	10.2 " " " "
Other Farm Chickens	19,826,000	11.2 " " " "

Average number of eggs produced per hen, in Texas in 1951 was 153, compared with a national average of 175 per bird. Recent increase in production of broilers in Texas has been rapid. In 1940 broilers totaled 6,000,000 birds while by 1951 the number had risen to 54,945,000. Turkeys on Texas farms January 1, 1953 were estimated at 615,000, compared with 549,000 birds one year earlier. Value per bird in January of this year was $5 compared with $5.80 one year earlier, and $4.74 as the 1942-51 average.

Although Texas is quite generally regarded in range beef cattle and sheep circles primarily as a breeding ground, appreciable numbers of cattle, sheep, and hogs are finished in Texas feed lots.

Since the establishment of the Texas Agricultural Experiment Station in 1888 research scientists have contributed much to the agriculture of this state.

Significant changes in Texas Agricultural industries have taken place within the past 25 years. Included among them are greater livestock and crop diversification, a change over from predominant cotton production to stock farming by many farmers. These factors have led to a more balanced and economical farm program in Texas.



Texas' early growth was based on livestock and agriculture. This is part of the giant Fort Worth stockyards and two of the large packing plants there.

Ten million dollar all-electric lumber plant being built by the Kirby Lumber Co. at Silsbee. Eighteen buildings, ten miles of railroad trackage are included in the project.

FOREST PRODUCTS

LUMBERING early became an important industry in the timbered lands of Eastern Texas. Prior to the railroad era, lumber was hauled long distances by wagon into the prairie lands of Central Texas; and with the coming of railroads a wide market for lumber was rapidly established as the productive, but timberless prairies and plains were settled. The forests of the Lake States had been pretty well cut over by 1890 and the lumber industry in the form of large scale enterprises migrated Southward and to the Pacific Northwest. This Southern migration accentuated the already established Southern lumber industry particularly in Texas, Arkansas and Louisiana.

In Texas heaviest production of lumber had been achieved prior to 1910; since then the output of lumber production in the State has steadily declined. However, paralleling the earlier southward migration of the lumber industry, there has now occurred a substantial migration of the pulp and paper industry into the Gulf States. Wood products other than lumber have been developed in several places in the State to a position of more than local importance—such as the manufacture of furniture, the making of cross-ties, telegraph and telephone poles, piling materials and the like.

In connection with the production of ties, poles and piling, a substantial development of the creosoting industry has grown up along the Gulf Coast particularly at Houston and Beaumont.

Still another wood products industry in Texas has to do with the utilization of the extensive cedar woodlands which characterize the broken, limestone hill country of the Eastern portion of the Edwards Plateau from Uvalde to Austin. The cedar brakes also extend northward from the Colorado, following the limestone area to Lampassas and Palo Pinto.

For years these cedar brakes have supplied vast numbers of fence posts for ranch lands in Western Texas. In places the production of charcoal in the past has been of local importance. Cedar oil used for a variety of purposes can be produced from these trees. Texas has one of the largest if not the largest continuous areas of cedar woodland in the United States.

Pulp and Paper. The history of the pulp and paper industry in Texas occupies a peculiar niche in the development of Kraft paper in the South. About 1903 an unsuccessful attempt to make paper from Southern pine was begun at Pensacola, Florida; later the equipment of this plant which used the soda pulp process was moved to Orange, Texas. Here in 1911 Edward H. Mayo first successfully made pulp and Kraft paper from Southern pine by use of the Sulphate pulp process. From these modest but notable beginnings, the realization grew that a sound commercial product could be made from Southern Pines. As is usual in such cases, the financing of the new industry was most difficult. When the second mill for using southern pines was established at Moss Point, Mississippi, it had had to be financed largely from England. From these humble beginnings a mammoth industry has developed in the South over a brief span of forty years.

The Champion Paper and Fiber Company established a pulp plant on the Houston Ship Channel in 1936, which is making bleached sulphate pulp from Southern pine and bleached soda pulp from hardwoods. Originally suited only to the production of pulp for the coarser papers, this process has been adapted by the Champion organization over a long period of experimentation and research to the production of a pulp suitable for the finest high grade white papers.

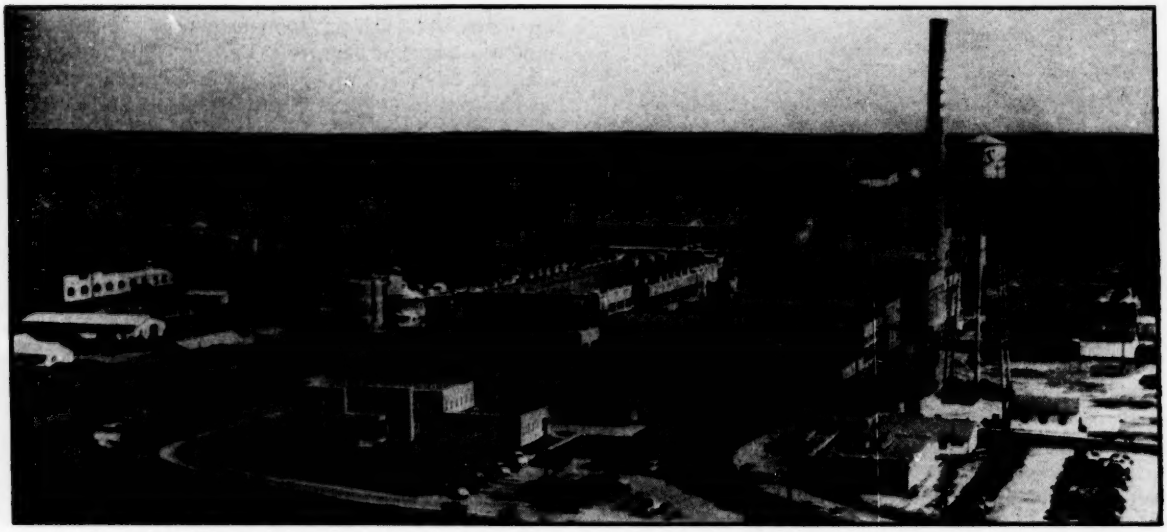
In 1939, after Charles Herty, a Georgia chemist, in cooperation with the U. S. Forest Products Laboratory, perfected the manufacture of newsprint from southern yellow pine, the South's first newsprint mill, the Southland Paper Mill, sprang up in a Lufkin cotton patch. Today, Texas pine can be used to make newsprint.

Forest Protection. The State organization chiefly concerned with good forest management and protection is the Texas Forest Service, a part of the Texas A. & M. College System. It is one of the few State forest services directly connected with a land grant college.

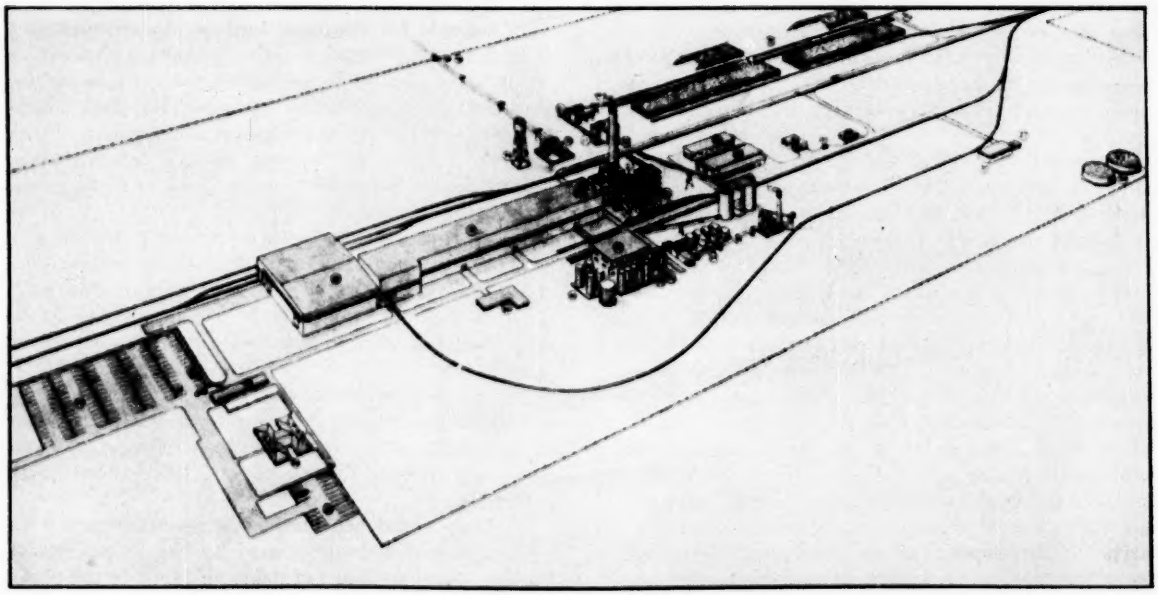
The major function of the Texas Forest Service is to make it possible for communities now dependent on forest industries to continue to exist. Forest management will insure the supply of wood needed by industries.

Idle and abandoned land is being reforested with trees produced and distributed by the Texas Forest Service. These seedlings of today will soon be tall pines ready for harvest in the future.

Woodville is the home of several large saw mills. Pictured here is Woodville Lumber Co. plant, one of the most modern in the state. Industries are being attracted to Woodville to use the local forest products, minerals and agricultural products.



Southland Paper Mills at Lufkin, first newsprint mill in the South. Paperboard is also manufactured at this plant.



Sketch of the new $22,000,000 plant of East Texas Pulp & Paper Company at Evadale.

Humble Oil Company's refinery at Baytown, largest in the world, is supplied with crude through great network of pipelines coming from rich oil fields in radius of hundreds of miles.

OIL AND GAS

Oil Production and Refining. In addition to ranching, agriculture and lumbering, there has come to Texas, since 1900, a very different line of industries which has virtually transformed the economic life of the State. This line of industries is concerned with the exploration and production, transportation and refining of oil; and more recently still the production, transportation and use of natural gas has grown into a giant industry.

Owing to its size, to the large number of its geologic regions possessing suitable structures and to the wide variety of its geologic strata ranging in age from the oldest oil bearing formations to the youngest, Texas has come to be by far, the leading oil and natural gas producing State, and it is important to note, Texas is the premier state as to rank in reserves of both these significant mineral resources.

Texas attained first place in natural gas production in 1929 and in oil production in 1928. Since those years Texas production of these commodities has forged constantly forward. The leading position of Texas in oil and natural gas production is obviously a major factor in the growth to large proportions, of the drilling and oil industry equipment concerns with the many accessory enterprises, in the State.

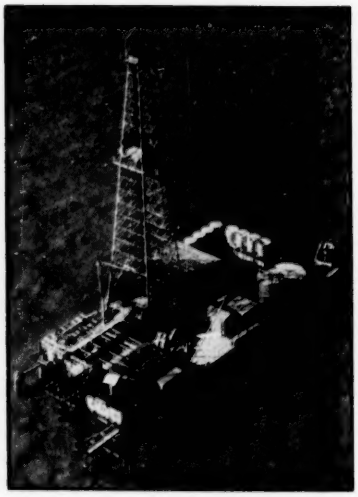
Oil refining, like oil production, had become of local importance in Texas prior to 1900 as at Corsicana; and for a few years after the Lucas gusher came in at Spindletop (1901) the Texas oil refining industry remained local in proportions. But since around 1910, paralleling the rapid increase in the production of motor vehicles and the resulting sharp rise in demand for oil derivatives, it has rapidly progressed to the level of a national industry of first magnitude. In 1930 Texas oil petroleum refining attained first place in the country.

The movement since 1930 toward concentration of modern refining capacity on the Gulf Coast with its access to Atlantic Seaboard markets by low cost tanker transportation in conjunction with the large reserves of crude oil in the State, promises to raise the rank of Texas still higher in oil refining.

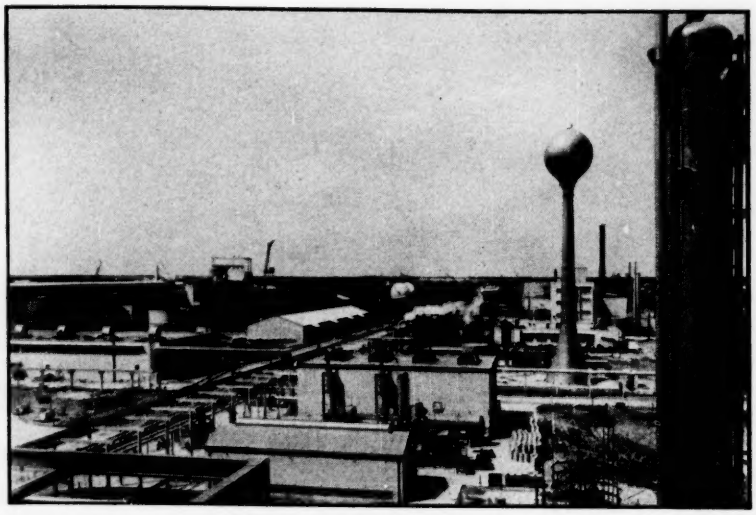
From the following tables it will be seen that the oil industry has grown to mammoth size.

TABLE I
TEXAS PRODUCTION OF CRUDE OIL
1896-1953

Year	*Thousands of Bbls.*
1896-1940 (Inc.)	6,579,807*
1941	499,208
1942	477,828



Magnolia Petroleum Co's. third drilling well in the Gulf of Mexico.



Ethyl Corp's. manufacturing center at Houston on the ship channel. Opened in the spring of '52, it produces Ethyl antiknock compounds.

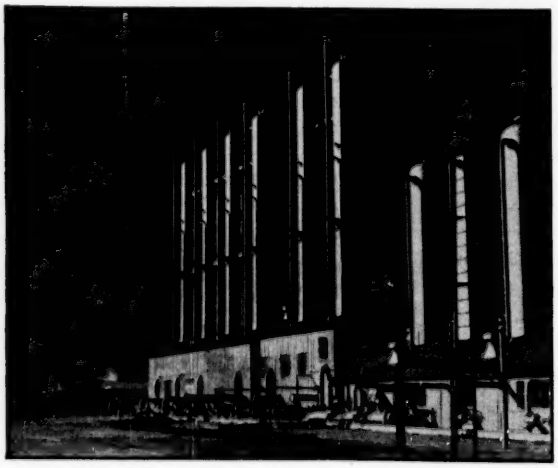
Year	*Thousands of Bbls.*
1943	587,436
1944	741,126
1945	751,045
1946	755,900
1947	816,188
1948	898,314
1949	736,627
1950	817,842
1951	991,983
1952	1,009,793
1953 to Aug. 1	590,772**
Total Production to Aug. 1, 1953	16,253,869

*Bureau of Mines.
**Preliminary figure.

TAXES PAID BY OIL INDUSTRY
1953-Fiscal Year

Crude Oil Production Tax	$123,488,148.05
Crude Regulatory Tax	1,924,493.57
Natural Gas Production Tax	20,981,422.65
Ad Valorem Tax	*
Franchise Tax	*
Well Servicing Tax	1,091,688.95
Carbon Black Mfg. Tax	1,724,811.27

* Not available.

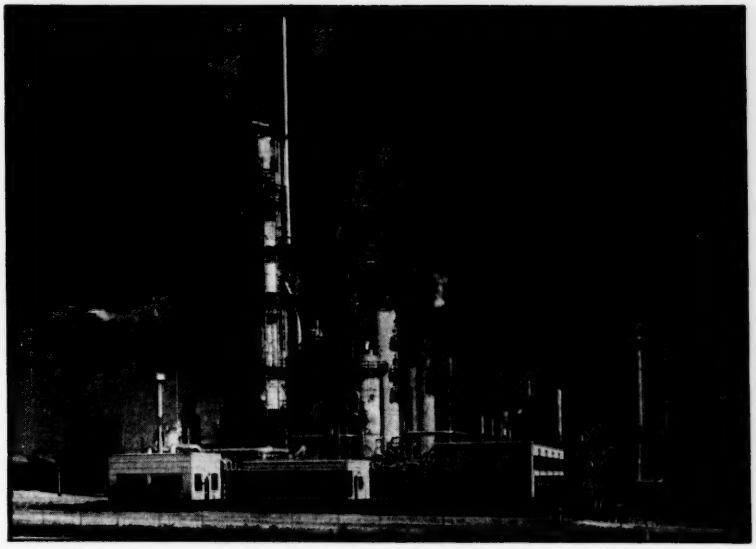


Natural gas processing facilities at McKee refinery and natural gasoline plant of Shamrock Oil & Gas Corp. at Amarillo.

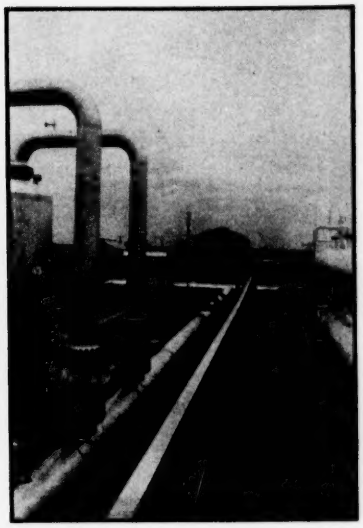
Approximately 55 to 60 per cent of this production was produced from the major fields shown in Table II.

TABLE II

Field and RR Comm. Dist.	*Date Field Discovered*	*Cumulative Bbls. Prod. to 8-1-53*	*Av. Dly. Prod. Bbls. July, 1953*	*No. Wells 8-1-53*
RR Com. Dist. 1				
Darst Creek	1928	23,869,416	9,034	417
Luling Branyon	1921	97,489,646	6,690	652
RR Com. Dist. 2				
Greta	1933	60,250,097	7,691	187
Tom O'Connor	1934	191,155,010	33,153	629
West Ranch	1938	83,149,843	19,196	566
RR Com. Dist. 3				
Anahuac	1935	119,649,952	18,440	322
Barbers Hill	1916	98,263,289	4,815	149
Conroe	1931	326,994,251	33,556	805
Goose Creek	1908	87,307,754	6,355	317
Hastings	1934	236,120,942	39,019	640
Hull	1918	116,472,305	7,731	250
Humble	1904	135,456,889	2,607	248
Spindletop	1901	132,527,235	1,321	158
Sour Lake	1902	92,697,378	4,122	296
Thompson	1931	181,872,701	29,559	328
Webster	1937	186,246,353	35,532	207
West Columbia	1902	115,034,732	5,933	155
RR Com. Dist. 5				
Mexia	1920	102,764,616	792	123
Powell	1900	125,076,937	886	124
Van	1929	230,031,041	30,548	544
RR Com. Dist. 6				
East Texas	1930	2,961,528,567	245,695	20,589
Hawkins	1940	158,838,229	52,848	616
Talco	1936	140,527,869	16,598	705
RR Com. Dist. 7-C				
Big Lake	1923	112,020,796	2,649	166
McCamey	1925	91,275,639	7,783	961
RR Com. Dist. 8				
North Cowden	1930	105,679,006	17,498	724
Foster	1932	76,330,369	11,780	637
Fullerton	1942	95,468,402	21,813	734
Goldsmith	1934	163,570,159	49,380	341
Hendrick	1926	222,597,074	3,364	214
Howard Glasscock	1926	161,384,658	18,501	1,063
Keystone	1930	117,642,869	30,554	876
McElroy	1926	121,780,126	20,503	930
Seminole	1937	77,362,995	18,769	413
Slaughter	1937	193,867,860	38,614	2,439
Levelland	1945	60,235,034	31,169	1,977
T.X.L.	1944	110,089,987	29,244	322
Wasson	1944	249,595,073	53,836	1,717
Yates	1926	405,382,633	33,833	594



Cosden Petroleum Corp's. modern refinery at Big Spring. 24,000 barrels of crude oil are processed daily. A $3 million addition is under construction.



New compressor station and appurtenant installations in Houston District in large United Gas Pipeline System.

RR Com. Dist. 9 K.M.A.	1911	98,473,233	4,759	1,310
RR Com. Dist. 10 Panhandle	1926	396,547,067	72,817	8,068
Totals		8,862,628,032	1,078,987	52,513

During the last quarter-century, Texas, like many other portions of the Nation, has come to depend on natural gas to keep the bloodstream of modern life flowing. In this brief span, natural gas has developed into a giant of an industry in its own right and has become an important factor in attracting to Texas hundreds of industrial plants which have changed the whole character of the State's economy.

In all this drama of progress through natural gas, the United Gas System, the world's largest handler of the wonder fuel, has played an outstanding role. It is a leader in all phases of the natural gas industry in Texas—production (through Union Producing Company), transmission (through United Gas Pipeline Company) and distribution (through the distribution divisions of United Gas Corporation). A pioneering company, its own activities and those of predecessor companies which have been welded into one integrated system go back as far as 50 years.

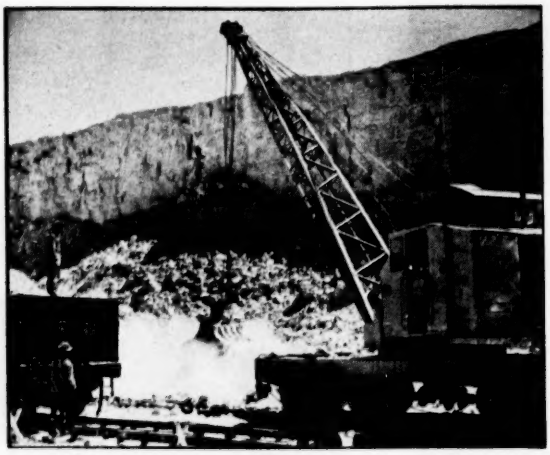
Typical of the manner in which United has met its obligations to the region it serves—an area consisting of parts of five States from Pensacola, Fla., to the international boundary at Laredo, Tex.—is the $250,000,000 expansion program now virtually completed.

This great program of construction has vastly increased the delivery capacity of United's system. A large share of the new facilities has been built in Texas, where expansion is a continuous process as United builds more and more facilities to serve growing cities and towns and to meet ever-increasing demands of new and existing industries.

The United Gas System in Texas now serves 293,182 residential, commercial and industrial customers in 158 towns and cities. United Gas Pipeline Company has more than 3,900 miles of main transmission lines and more than 550 miles of gathering lines in Texas. Four distribution divisions operate approximately 6,500 miles of distribution and service lines.

Union Producing Company owns gas reserves in 31 Texas fields. It carries on an intensive program of exploration and drilling for both gas and oil. In addition to supplying substantial quantities of natural gas to United Gas Pipeline Company, it is an important producer of crude oil.

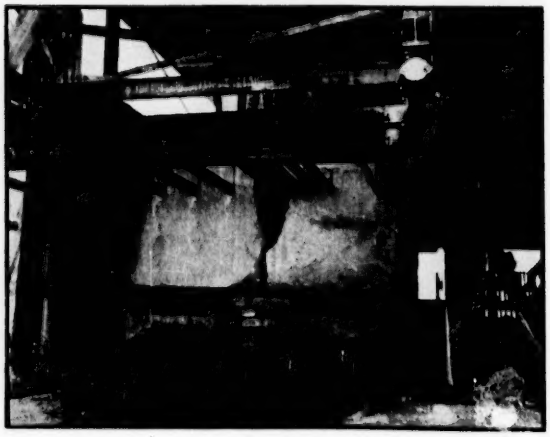
Welding scene on 30-inch pipe being laid near Wharton in United Gas Pipeline System.



Facilities of Texas Gulf Sulphur Co. at New Gulf. These mines produce 2,000,000 tons of sulphur a year.

MINERALS

OF the approximately two and one-half billion dollars worth of minerals produced yearly in Texas, about 80 per cent is derived from petroleum, natural gas, and natural gas liquids. Exploration for these commodities is in high gear, and the first six months of 1953 saw 8,427 wells completed in Texas. Most of the remaining 20 per cent of mineral income is derived from the products of a very active chemical and building industry; these are mainly sulfur, cement, sand and gravel, stone, lime, clays, salt, and gypsum. Other mineral commodities that are or have been produced in the State are magnesium, helium, celestite, soapstone, feldspar, fluorspar, quicksilver, magnesite, gem stones, asphalt, carbon black, magnesium sulfate, magnesium chloride, rock wool, terrazzo, sodium sulfate, graphite, peat, haydite, bromine, pumicite, glass sand, lignite, grinding pebbles, iron ores, copper, gold, lead, and silver. Some of these products, although limited or small in total value, are critical materials very important to our national security. The Southwest Graphite Company's operation northwest of Burnet in central Texas is one of two currently producing sources of domestic graphite and is strategically important to our electrical industry and to atomic research. The Dow Chemical Company's Freeport plant produces magnesium and bromine from seawater and leads the world in the production of magnesium.



Cutting limestone at quarry of Texas Quarries, Inc., near Austin.

Texas has never been an important producer of metals, although sporadic production of copper and/or lead has been achieved in Brewster, Presidio, Culberson, and Hudspeth counties in far west Texas.

A newcomer to the Texas scene is a recently discovered talc district in Hudspeth County in west Texas. Although current production is small and confined to the operations of the Southwestern Talc Company, there is a large potential tonnage in the area that is as yet undeveloped. Reserves are probably in excess of 10 million tons, and the material to date has proved to be an excellent ceramic-grade talc.

The petroleum industry and organizations which serve it are spread throughout east Texas and along the length of the Gulf Coastal Plain.

The Coastal Plain area is a headquarters for the chemical industry. Sulphur is produced in Brazoria, Fort Bend, Liberty, and Wharton counties. Texas Gulf Sulphur Co. is a leading producer. The installations of the Texas Division of the Dow Chemical Company dominate the area of Freeport and produce magnesium, bromine, and many other chemical products. Large cement plants using oyster shell for their raw material are located at Houston and Corpus Christi, and recently plans have been made to survey the shell resources along the Gulf Coast. The new plant of the Aluminum Company of America at Rockdale in Milam County is nearing completion and will exploit the lignite of the area for power. Development of a process to utilize lignite for industrial plants has stirred up a great deal of interest in Texas where the U. S. Geological Survey has estimated reserves of 23 billion tons with 11½ billion tons available under present conditions. The Aluminum Company of America recently announced that the contract for research on the lignite process has been let to Koppers Company, Inc.

At Daingerfield in east Texas the Lone Star Steel Company has recently completed a new steel plant that makes them a completely integrated iron and steel producer. One of their principal products will be well casing for the oil industry. The Sheffield Steel Company of Houston also utilizes east Texas iron ores.

In addition to lignite, brown iron ore, and sulfur, extensive deposits of bleaching and burning clays, pumicite, salt, and gypsum are exploited in this area. The salt is mostly rock salt from salt domes. Texas clay and tile plants are mostly concentrated in this eastern region.

The general area of central Texas (including the San Antonio area in what is commonly considered as southwest Texas) and north Texas is also a great population center. Although oil fields are scattered throughout the area, production of petroleum is cen-

tered in the north and southwest parts of this Texas heartland. Cement plants are located in the Dallas-Fort Worth area, at Waco, and at San Antonio. Central Texas is also a center of lime and stone production. The stone marketed under the name of Cordova shell and Cordova cream is produced by Texas Quarries, Inc., from their property at Cedar Park, north of Austin.

The Southwest Graphite Company is currently producing high purity crystalline graphite from their property northwest of Burnet. The Southwest Talc Company recently completed a new mill at Llano to process crude talc shipped in from their new west Texas quarry and, probably in response to the talc discovery in west Texas, a new tile plant is under construction near Coleman. An established tile plant in Dallas also utilizes west Texas talc. Gypsum deposits occur near Fredericksburg. The main source of glass sand in the State is at Santa Anna in Coleman County. The mineral king throughout the vast West Texas area is oil, and there is virtually no unleased acreage remaining. Recent activity centers in the Nolan, Kent, and Scurry County areas and along the eastern edge

Texas Vitrified Pipe Co. plant at Mineral Wells where sewer pipe is made.

Tin smelter in Texas City is the only plant of its kind in the United States.

of the Central Basin Platform, although wildcatting continues throughout the area.

Cement production in west Texas is restricted to a plant at El Paso. Northwest Texas is the principal gypsum-producing area in the State; the new talc deposits in Hudspeth County have already been discussed. The Gifford-Bill plant at Allamoore, Texas, has been producing a superior crushed stone since 1926.

In this area of west Texas and especially Trans-Pecos Texas there are potential large tonnage-low margin deposits of building and industrial materials

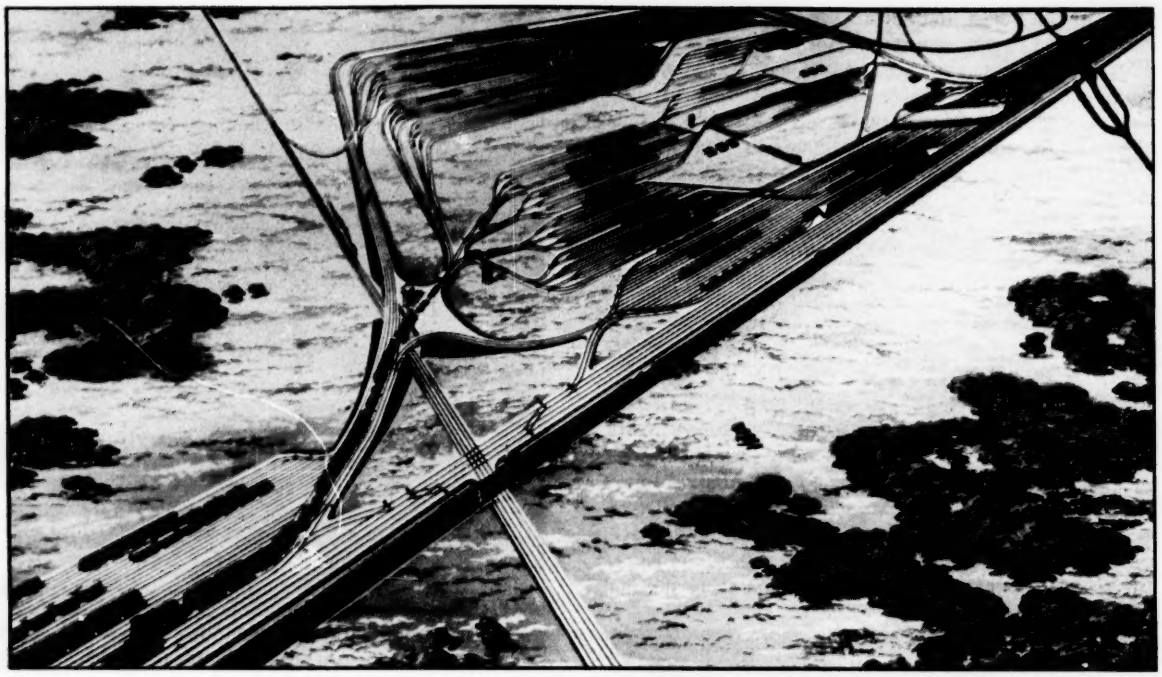
One of Gifford Hill & Co. sand and gravel plants. This one is located at Daingerfield.

that are undeveloped because of distance from centers of consumption and lack of transportation facilities. Possibly the future will see more activity in this area, but the desert terrain of much of the region makes it unlikely.

Materials that do not lend themselves to analysis by area, such as sand and gravel, industrial water, agricultural water, and potable water are, of course, found throughout the State. Sand and gravel in Texas is a fifteen million dollar a year industry. Drought has focused the attention of the people on the water problems of Texas as major cities depending on surface reservoirs found themselves short of water, farmers and ranchers found themselves without water for crops and stock, and irrigation districts found their water tables dropping. With public awareness of the importance of water resources, a commission has been formed to study the problem, and the Texas Board of Water Engineers and the U. S. Geological Survey have intensified their activities in the State.

With continued growth of population and the tendency of industry to move to cheap power sources, the prognostication for the Texas mineral industry is continued growth and expansion, particularly in the field of non-metallic industrial minerals.

First of several kilns being built at plant of Southwestern Brick & Tile Co. at Snyder.



Southern Pacific is spending $6,000,000 in Houston to build one of the largest and most modern pushbutton gravity switching yards in the nation, as shown in the sketch above.

TRANSPORTATION

RAILROADS

Texas is served by nine major railroads and many other smaller lines. The major roads are the Missouri, Kansas & Texas, "Katy," Southern Pacific, Rock Island, Missouri-Pacific, Frisco Lines, Texas & Pacific, Santa Fe, Kansas City Souhtern, and St. Louis-Southwestern.

With almost 16,000 miles of mainline track, Texas ranks first among the states in railroad mileage.

The railroads have been highly instrumental in the industrial development of the state. The agricultural and industrial development departments of these railroads work unceasingly to attract new industries to locate along their lines.

Through their efforts, the railroads themselves are prospering, and what is more important to Southerners in general, as each new plant goes into Texas, the state moves closer to a realization of her tremendous industrial potential.

HIGHWAYS

Constantly increasing stress is being placed on highway development in the State's economic planning.

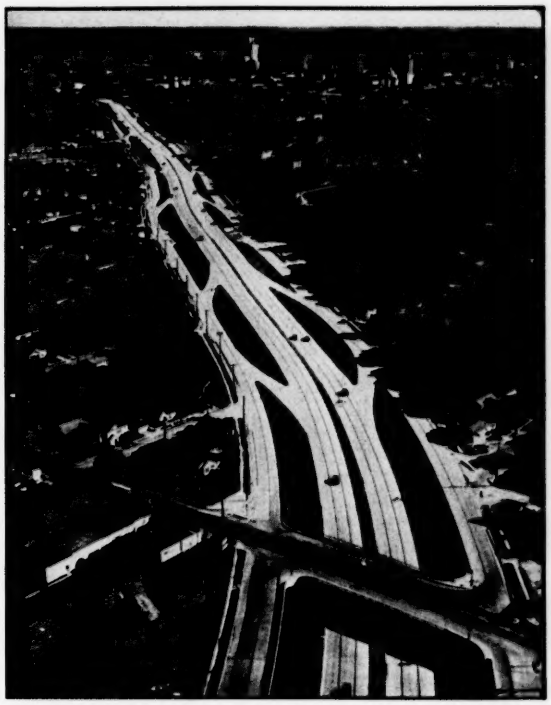
At present over 44,000 miles of improved roads are embraced in the State Highway System, and of these 40,000 are completely paved.

In addition there are nearly 165,000 miles of county roads of which a good portion are well paved.

At left—Cargoliner of Lykes Bros. Steamship Co. loading grain at Galveston. Center—view of recently completed Highway 90 bridge across

Neches River at Beaumont. Right—One of the luxury Constellations of Delta-C&S Air Lines that serves Houston.

Port of Beaumont. Bethlehem Shipyards at upper right. Port has recently completed $1,500,000 improvement program.



Central Expressway stretches through the heart of Dallas and will cost $21,000,000 for the eleven miles it covers.

Traveling these highways today are Texas owned automobiles to the number of 3.3 million, a gain of 80 per cent over the number registered in 1940.

While automobiles were increasing at this rate, population was growing at a rate of 26 per cent, indicating clearly the increase of cars per capita.

All of this has taken place during a period in which Texas experienced great industrial expansion.

The Texas Highway System provides an excellent paved network of roads for industry in the state, affording ready access to far flung markets and raw materials, connecting the high plains with the seaports, the farms with the metropolis, and the interior of the state with its key border points.

AIR TRANSPORTATION

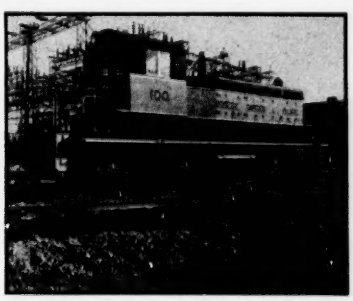
Texas is served by many regularly scheduled airlines, which operate over more than 11,000 miles of air routes in 70 odd Texas municipalities. These lines include American Airline, Eastern Airline, Braniff, Pan-American, Delta-C&S, Trans-World, Trans-Texas, Pioneer, Continental, Mid-Continent, and Central. In addition to these, many hundreds of non-scheduled cargo and passenger operations add their contribution each month to the state's transportation picture.

Transport of cargo by air has become a practical necessity to hundreds of Texas manufacturers and retailers, farmers and industrialists. Slick Airways, pioneering from its headquarters at San Antonio, has set an enviable record in peace time cargo transport. A considerable portion of this cargo, as well as passenger traffic, moves through Texas' many fine airports at Dallas, Houston, San Antonio, El Paso, Fort Worth, etc.

PORTS

Texans can and do boast of the many deep water ports in the state. These include the ports of Houston,

Harbor facilities of Kansas City Southern Lines at Port Arthur.



Diesel switcher of Roscoe, Snyder & Pacific, important link in east-west railway system.

Tanker entering Port of Corpus Christi through the bascule bridge.

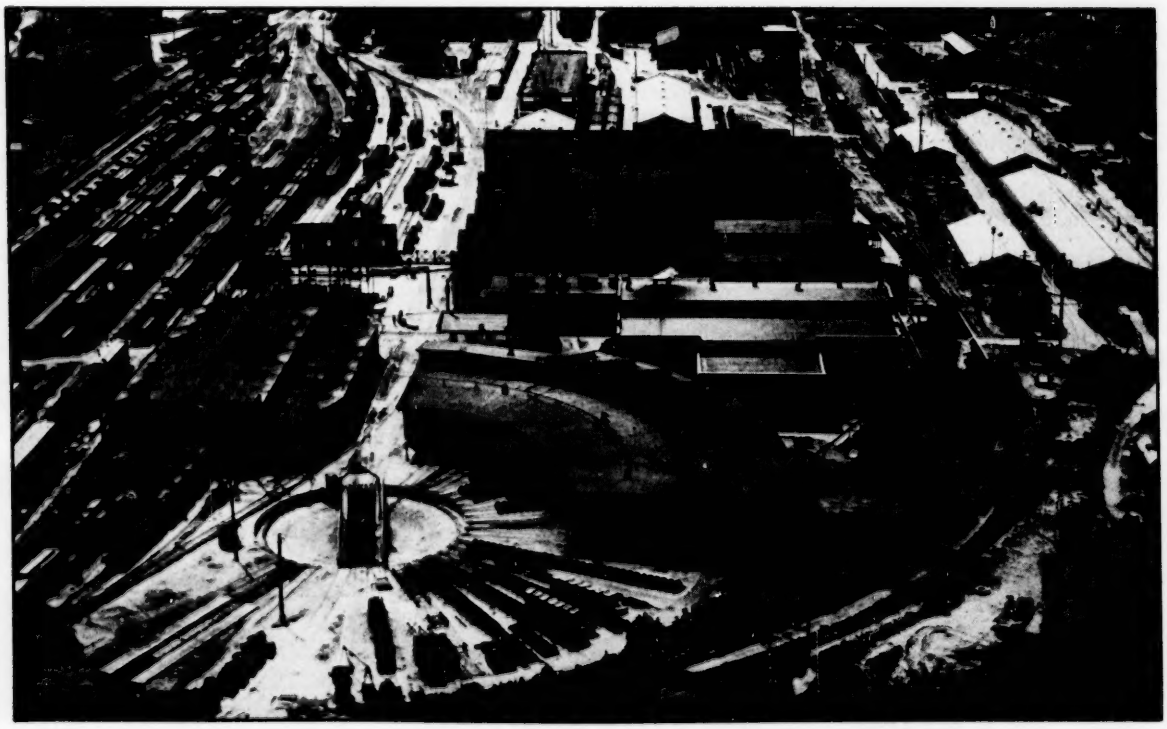
Missouri-Kansas-Texas Railroad, connecting Texas with the gateways of Kansas City and St. Louis.

Galveston, Texas City, Sabine Pass, Port Arthur, Beaumont, Orange, Port Neches, Port Aransas, Ingleside, Corpus Christi, Brownsville, Port Isabel, Freeport, Harlingen and Port Mansfield.

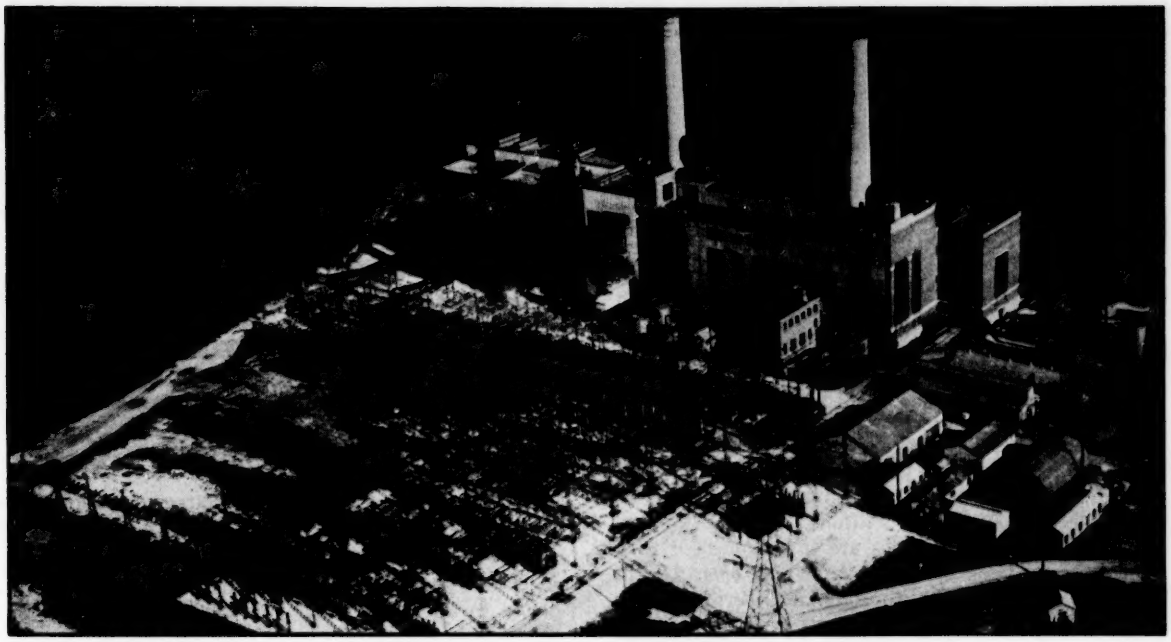
The grand total of all Texas port traffic in 1951—imports and exports—amounted to 16,176,000 tons, valued at $1,655,200,000. Leading the parade was the port of Houston which has improved its position to one of great prominence among the nation's ports. Plans for this port's future include a million dollar open wharf and a 20-year survey of needed port improvements. Corpus Christi is one of the state's busiest seaports. It handles mostly petroleum products, cotton and chemicals, and expects to become the center of grain shipping.

Brownsville, the most southerly port on the Texas Gulf, serves the Rio Grande Valley area and northern Mexico. Included in its cargoes are cotton, citrus fruits, ores, metals and chemicals. Beaumont, at the head of a channel extending 20 miles from the Sabine waterway, features two main items of export—rice and oil. Orange boasts a great shipping and shipbuilding industry. A great deal of oil moves out of this port, but Orange also exports considerable timber, rice and cattle. Galveston is one of the few Texas cities blessed with a natural harbor. It is known as a dry cargo port. It gives a livelihood to 30,000 of the city's population and fights for the products handled by men such as agricultural products and sulphur shipments. It also handles raw wheat, cotton, sugar, and many other commodities. Texas City, the port that was almost blown off the map six years ago, has made an astounding recovery. It ships for the most part petroleum, cotton, sulhpur, grain and processed products and has attracted industries that have an annual payroll of $20,000,000. The biggest Texas petroleum exporting port is Port Arthur. It also boasts a grain elevator operated by the Kansas City Southern Railway which has a capacity of 500,000 bushels.

Petroleum is one of the important exports of Port Isabel, which is Texas' southernmost port. Port Mansfield, opened in 1950, has shown increased development with each passing year. All of these ports are tremendous assets to the state's economy and to her continued industrial development.



Overall view of Texas and Pacific Railway shops installation at Marshall.



Neches Power Station of Gulf States Utilities Company with 264,000 kw generating capacity is situated in the heart of one of the largest oil refining centers in Southeast Texas.

POWER

TEXAS is served by a network of power lines that reach into every one of the 254 counties. There is scarcely any part of the vast area of 267,339 square miles that is without electricity.

There has been no other state in the entire union more aggressive in fostering projects designed to develop the enormous resources within its boundries. Nearly all of the business-managed power companies are in the midst of making extensions, and several large new plants are in the blueprint stage, in anticipation of new demands for the ever-increasing list of new industries flocking to Texas.

The heaviest construction program in the history of **Texas Electric Service Company** is now well under way. It is a continuation and enlargement of the company's construction program to provide ample electric light and power facilities for the rapidly growing cities and towns, industries and rural areas served by the company.

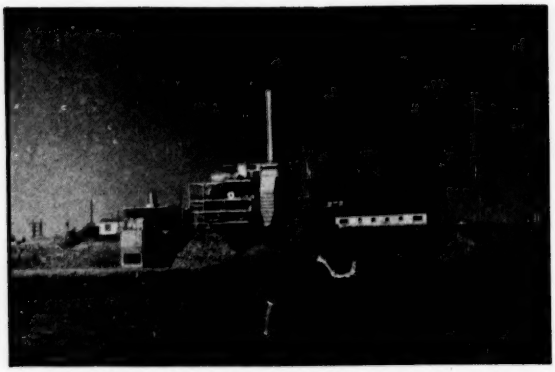
Texas Electric Service Company construction expenditures in the six year period 1947-1952 inclusive were close to $100 million, and expenditures for 1953 will be approximately $25 million. This money is going for additional power plant generating capacity, new high voltage power lines, substations, extension to distribution systems, new and enlarged substations and other facilities required to keep abreast of the growth of the area served.

Two power generating units were added to the Texas Electric Service Company power system in 1952, a 44,000 kilowatt unit at the company's Morgan Creek steam-electric generating station on Lake Colorado City in Mitchell County, and an 80,000 kilowatt unit at its North Main steam-electric generating station in Fort Worth. These two units increased the company's generating capacity to close to half a million kilowatts, four times the capacity it had at the end of World War II.

While no additional power plant capacity is scheduled for completion this year, the budget includes work to be done on two additional units totaling 185,000 kilowatts capacity to be in operation in 1954.

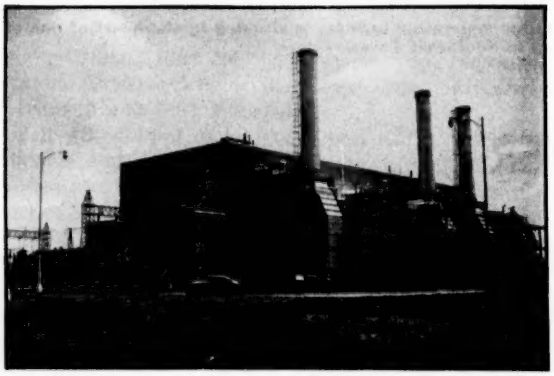
Major construction projects completed in 1953 include a 132,000 volt power line from Fort Worth to Wichita Falls. This new line provides another interconnection of the company's power system.

50,000 kw Monahans plant of Texas Electric Service Company serves areas as far as 259 miles away.



West Texas Utilities Co's. new Paint Creek Generating Station on Lake Stamford was placed in operation last July.

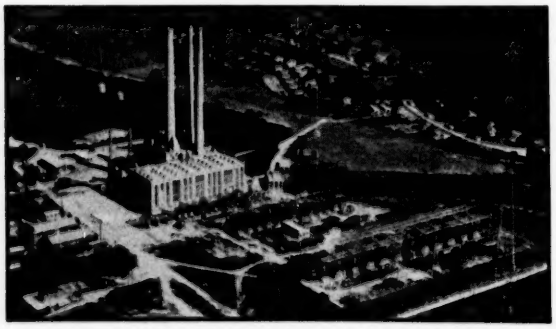
The Texas Electric Service Company power system provides electric service to more than 100 West Texas cities and towns from an integrated power system of steam-electric generating stations and high voltage transmission lines. Its lines are interconnected with the power systems of other companies operating in West Texas, and also with companies serving other



Southwestern Gas & Electric Co's. Knox Lee Power plant, largest in the company system, is at Lake Cherokee.

sections of Texas. Together, these power systems form what is known as the Texas power grid, a network of power lines connecting the state's largest power plants.

Texas Power & Light Company serves 488 communities in a 52-county area of North, Central and East Texas, comprising some 47,200 square miles. The Company is now carrying on an expansion program which by 1955 will increase its firm capacity to 643,000



Trinidad generating station of Texas Power & Light Co., showing, in addition, switch yard warehouses, laboratory, etc.

kilowatts, which is approximately four times that of 1941, the first year of World War II.

One major outdoor type power plant, the 66,000 kilowatt Lake Creek Steam Electric Generating Station, was completed in 1953 and two other major generating stations were under construction, scheduled for completion in 1954 and 1955.

The Texas Power & Light Company at the end of 1952 owned and operated 17,498 miles of lines, of which 2,753 were transmission lines of 22,000 volts and over. The Company's transmission lines are interconnected with lines of adjacent systems so that surplus power may be made instantly available at the points served in the event of emergency need.

The West Texas Utilities Company serves a vast segment of Texas extending from northwest of the Red River on the Oklahoma border to the Rio Grande. The service area of this company, greater than the combined areas of seven eastern states, is criss-crossed by more than 3,150 miles of high-voltage transmission lines.

Five modern steam generating stations and a gas turbine station are interconnected to supply electric power to an aggregate population of 600,000 in 168 towns and communities in 49 West Texas Counties.

An abundance of low-cost fuel and electric power, the high income level, and a mild climate which allows year round out-door construction and manufacturing operations make the region highly attractive to industry.

Steadily increasing generating capacity, the West Texas Utilities Company has kept ahead of the region's ever-growing demand for electric power.

This year the company put into service two new turbo-generating units adding more than 66,000-kilowatts to the system's generating capability.

The 45,000 square mile service area of the **Southwestern Public Service Company** embraces the Panhandle and South Plains of Texas, the Oklahoma Panhandle, the Pecos Valley and Clovis-Portales areas of Eastern New Mexico, and the southwest corner of Kansas.

To provide electric power for nearly 160,000 customers in this four-state territory, the company employs 11 base-load electric generating stations, and a transmission line network of more than 3,000 miles.

With a present system capability of 538,600 kilowatts, Southwestern Public Service is adding 105,000 kilowatts in 1954, with 52,500 kilowatt additions at the Denver City and Moore County plants.

Central Power and Light Company serves the rich area in the triangle reaching roughly from Del Rio to Columbus and down to Brownsville, taking in the fabulous Rio Grande Valley.

One new power plant, the 33,000 kilowatt Laredo power station, was completed and put into service two years ago. A 33,000 kilowatt addition to the company's Victoria power station was completed last year. Equipment for 66,000 kilowatt unit, scheduled for service by January 1, 1954, has been ordered.

Gulf States Utilities Company serves an area of 28,000 square miles in Texas and Louisiana. General offices of the company are at Beaumont, Texas. Division

offices are at Navasota and Port Arthur, Texas, Baton Rouge and Lake Charles, Louisiana.

To take care of growing needs for electric service in the area, Gulf States Utilities Company has greatly enlarged its production and distribution capacities in recent years. Growth of the area is indicated by generating capacity figures: 1950—383,500 kw; 1953—578,500 and additional 80,000 kw scheduled for completion next spring will boost system capacity to 658,000.

The company serves 225,000 electric customers, 39,000 gas customers in Baton Rouge and 21,000 water customers in Orange and Lake Charles.

Community Public Service Company is an independent operating company, with General Offices in Forth Worth, Texas.

The company supplies electric service to 66 incorporated cities and towns in Texas and to 47 unincorporated communities in the state. It also supplies gas to eight Texas towns and communities, water service to four and operates one ice plant.

Electric properties of Community are distributed throughout the state, with the bulk of them being located in the North Central section of the state. Others are located from the Texas Panhandle throughout Northwest and Northeast Texas, westward to Pecos, Reeves and Winkler Counties and in South Texas, along the Gulf Coast.

Community Public Service Company purchases most of its power requirements from other utility companies but maintains twelve Diesel power plants throughout the state for standby service.

Southwestern Gas and Electric Company serves Northwest Louisiana, Western Arkansas and a 17-county section of East Texas. The Company's largest power generating plant, Knox Lee with a capacity of 105,000 kilowatts, is located on Lake Cherokee in Gregg county, Texas.

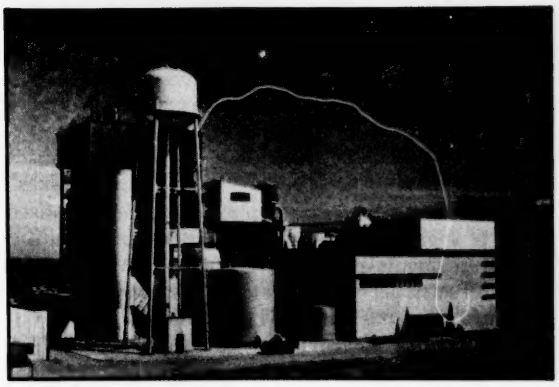
Scheduled for completion early in 1954 is a new 40,000 kilowatt steam generating plant at Lone Star, Tex., site of the huge Lone Star Steel Company mills. With the completion of this plant the Company will have added 200,000 kilowatts of capacity since the close of World War II.

Lower Colorado River Authority, a nontax-supported agency of the State of Texas, provides all the requirements for electric power and energy for 41 central Texas counties, an area larger than the New England States.

In addition to serving 34 larger municipalities, 250 smaller communities and 11 rural electrification cooperatives within this 31,000-square-mile service area, LCRA provides large blocks of power to its neighboring utility systems.

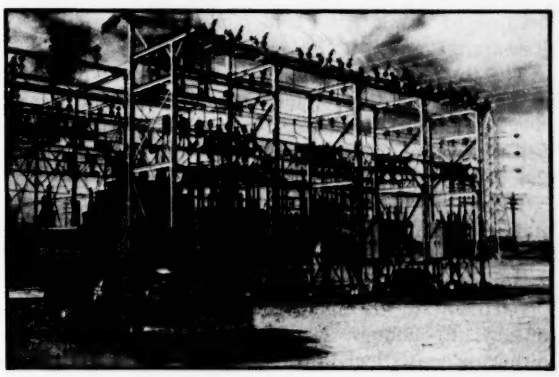
Created in 1934, this state-owned, nonprofit corporation owns and operates six major dams and power plants on the Colorado River, and operates a steam generating station on the Comal River at New Braunfels under a lease arrangement.

Houston Lighting & Power Company serves an area of approximately 5,600 square miles, centering on Houston, the South's largest city, and including Galveston and 144 smaller towns and communities. Much of the Gulf Coast's industrial, commercial and population growth is centered in this area.

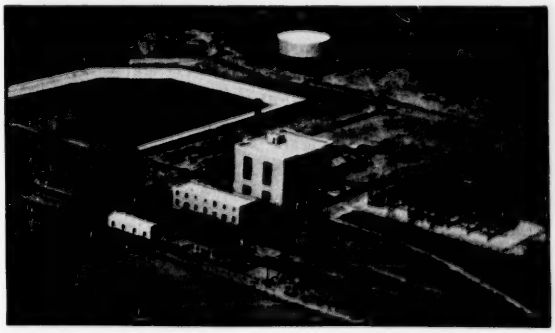


Southwestern Public Service Co's. Plant X in Lamb County has generating capacity of 165,000 kw.

In an industry characterized by rapid growth throughout the nation, the growth of Houston Lighting & Power Company has been outstanding. Expansion of the company's generating and distributing facilities has been continuous since 1946. More than 120,000,000 dollars was invested in such facilities during the six-year period ending December, 1952. The company's generating capacity of 250,000 kilowatts at the end of 1946 will have been supplemented by another 600,000 KW by the end of this year. This is almost two and half times the capacity built up during the first half century of the company's existence.



One of new substations of Community Public Service Co. near Pecos.



Laredo Power Station is Central Power & Light Co's. newest. Its net capability is 33,000 kw.

RESEARCH

WITH Texas becoming rapidly more industrialized, there is a growing need for public research facilities for all segments of business, big and little. An important recent development at The University of Texas' Balcones Research Center is a substantial increase in the volume of industrial research. Thirteen of its twenty-two laboratories are contributing research of direct benefit to industry.

Very frequently a company without the financial resources to build and maintain its own research laboratories has come to The University of Texas with its problems. In many instances the University has been able to render the desired service immediately and at a nominal cost because a laboratory equipped to perform the research already was functioning at the Research Center. In cases where such a laboratory did not exist it has been a relatively easy operation to install equipment needed for a specific research problem because of ample space and facilities at the 400-acre Research Center.

The Bureau of Business Research at the University of Texas in Austin, rounds out twenty-seven years of service to the citizens of the state this coming December. Since its inception in 1926, the Bureau has served the people of Texas in numerous ways.

The basic function of the organization is collecting and interpreting statistics through cooperation with the Construction Division of the Bureau of Labor Statistics, Department of Labor; the Bureau of Census, Department of Commerce; and the Bureau of Agricultural Economics, Department of Agriculture, in gathering statistical information on Texas business.

Statistical summaries are published in a monthly journal, the *Texas Business Review*, and comprehensive cumulative data are released in semi-annual issues. The *Review* is supplemented by special monthly releases on construction and retail trade in Texas.

Located immediately west of San Antonio are three scientific institutions founded to serve the man-in-the-street. They are the Southwest Research Institute, The Institute of Inventive Research and the Foundation of Applied Research. When the nonprofit Southwest Research Institute opened its doors on Essar Ranch near San Antonio six years ago, one of the first companies to seek its assistance was the Celanese Corporation of America.

Celanese's plant at Bishop in South Texas was having trouble with disposal of a waste product—in this case a plant effluent.

Since it was created to help companies solve their technical problems, Southwest tackled the job and—because its efforts proved of value—is still working with the plant's staff on various aspects of its activities in a continuing scientific research program.

Among business men the question naturally arises: Why should Celanese, whose great research laboratories dwarfed those of the infant Southwest Research Institute, go to it for help? The answer is that Celanese knows the value of research. It knows that only by continuing industrial research will it stay abreast of—and ahead of—its competitors. It has learned by experience that unless products and processes are constantly improved, they soon become obsolescent.

An Celanese is but one of an increasing number of South Texas organizations which have called upon this scientific research organization for help.

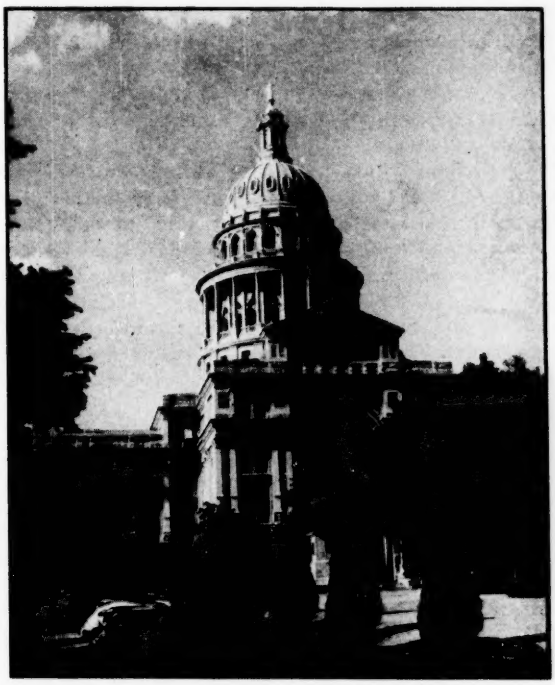
With the mounting industrialization of the area, the Institute also is growing. Founded by Tom Slick and supported by many individuals and companies, the Institute now employs more than 450 people, and performs nonprofit industrial research at a rate of more than $3,000,000 a year.

Newest research study for industry at the Texas Engineering Experiment Station (a part of the Texas A. and M. College System), College Station, is one aimed at determining precise needs in shipping and travel to be encountered in future years. The data forthcoming from this survey are expected to enable planners and designers of highways and other means of travel and shipping to prepare for the changes and trends in transportation requirements likely to occur in the future.

In addition, other surveys of the Station have attempted to reveal existing markets to industrialists seeking to initiate or expand manufacturing operations in Texas. These market appraisals are determined on the basis of out-of-state purchases. Recent ones show that approximately $500,000,000 worth of foods, $136,000,000 worth of chemicals, and $750,000,000 worth of textiles and apparel are purchased from out-of-state suppliers annually. Special studies have determined that Texas has market potentialities for manufacturing in the fields of special farm implements, low-cost furniture, dinnerware, and artware.

Laboratory research of pilot plant and larger scale is conducted in a number of engineering categories. Whenever possible in such research, attempts are made to utilize the natural resources of the state to provide raw materials for new industries. Much laboratory research is centered on improvement of processes and techniques in existing industries and the utilization of waste materials as by-products. Major work presently active is concerned with agricultural aviation, school building architecture, petro-chemicals, cottonseed processing, highway and bridge construction, home cooling, petroleum production, foundation engineering, chemurgy, water purification, and sanitation.

By means of the *Texas Engineering Experiment Station News*, a free quarterly magazine, current progress in the entire engineering and industrial research program is brought to an interested circulation. Other publications—bulletins and research reports—also are issued. These contain detailed accounts of specific research effort that has carried to concluding results.



View of the State Capitol at Austin.

LEGISLATION—TAXES FINANCE, INSURANCE

Legislation—Taxes—Industrial expansion continues to flourish in Texas. This is evidenced by the fact that more than 900 new business establishments employing eight or more persons have opened their doors in the Lone Star State within the last two years. Around two hundred of these firms are engaged in manufacturing. Approximately $1.5 billion dollars of new plant and commercial construction has been completed during this period and is now being operated.

Undoubtedly this expansion has been influenced by the favorable legislation and tax climate which has prevailed in Texas for many years. And, if experience is any indicator of the future attitude of the Legislature, the continued decentralization of industries to the Southwest generally and Texas particularly is not to be impeded. The Legislature has consistently refused to consider state-imposed individual and corporate income taxes, and the consensus is that a general sales tax is not remotely possible.

The Legislature, incidentally, is composed of a Senate of 31 members, elected to four-year overlapping terms, and a House of Representatives of 150 members elected to two-year terms. The executive department, headed by the two-year-elective-term Governor, administers more than 150 officers, boards, commissions, and agencies. Only a handful of state officials are elective, including the Lieutenant Governor, Attorney General, Comptroller of Public Accounts, Treasurer, Commissioner of Agriculture, Commissioner of General Land Office, and the three members of the Railroad Commission. Most of the others are appointed by the Governor, usually with the consent of the Senate.

Although it would appear the legislative branch wields considerable dominance, in 1942 the people of Texas amended their Constitution to put the state on a "pay as you go" basis. Before any appropriation bill can be signed by the Governor, except those declared an emergency and passed by a four-fifths majority of the membership of both houses, the Comptroller of Public Accounts must certify that sufficient tax revenue is in sight during the next biennium to liquidate the appropriation.

In the past eleven years Texas has had no deficit spending. Texas government costs exceed half a billion dollars annually, and the Comptroller's estimate on the adequacy of funds has consistently been on the conservative side.

This does not mean that the legislature cannot appropriate according to its needs. It does mean, however, that any tax increase to support any appropriation must be voted during the same session, with the result that the general public is informed exactly for what purpose the increase is contemplated and can voice either protest or persuasion before the tax or the appropriation is voted. And the voice of a Texas public can be lusty.

Texas revenue is derivied broadly from 10 sources—covering 56 major sources. One-third or all revenue comes from severance taxes on the state's natural resources, with oil as the primary income producer in the revenue system. The tax on oil alone contributes 27% of all revenues. The balance stems from nine other broad sources; these are, together with the per cent of total revenue each represents:

1.	Gasoline and fuel	23.6%
2.	Motor vehicle and operators	12.7
3.	Cigarette and tabacco	8.0
4.	Property tax	5.5
5.	Other (including such major sources as communications, utilities, transportation, amusement, cement, carbon black, chain stores, poll tax, et al)	4.7
6.	Alcoholic beverages	4.2
7.	Insurance	3.7
8.	Corporation franchise	3.3
9.	Death and gift	1.4

In any discussion of taxes the unique position of Texas in the ownership of several large endowment funds is of considerable interest. These funds at present amount to some four hundred million dollars and result largely from the fact that Texas retained its public domain when it was annexed to the United States. Funds have accumulated mainly from land rental and oil royalties. For many years funds increased slowly and came primarily from the sale and lease of low-priced range lands but the discovery of large oil fields in the public domain has caused such acceleration of growth it is predicted that the state will eventually have in its permanent school fund the greatest endowment in existence. The University of

Texas now has one of the greater endowment funds among single educational institutions, and if the rate of growth of recent years continues it could easily become the largest such fund in the United States.

Any corporation operating or contemplating operating in Texas, unless engaged in the production of raw materials, is subject to only four direct state taxes. These are corporation or franchise, license, property, and unemployment compensation tax.

Texas' average unemployment insurance tax rate has held at six-tenths of one per cent for the past three years, while the U. S. average tax rate has run 1.4% to 1.6% of taxable wages. Only three other states had a lower average tax rate (0.5%) than Texas last year. Despite the low average tax rate among Texas employers as a whole, efforts are aimed continuously at helping Texas employers reduce their tax rates individually.

Insurance—The Board of Insurance Commissioners recently released a report which shows that there are 1,832 companies licensed in Texas, with 1,170 of them domiciled in the State. The vast bulk of the Texas companies fall within the life, accident and health, and hospitalization fields, the number being 986. And in turn, most of these, or 743 of them, operate in limited areas with restrictions on benefits or coverages offered.

Excluding the membership fees collected by the large number of local concerns, premium payments in 1952 aggregated $1,122,015,973, of which an estimated $678,-014,183 represented collections under life and other personal insurance coverages and the remainder, $444,-001,790, went to property and casualty firms.

The Texas companies, by types, fall into the following categories: Stock life, 230; local mutual aids, 278; burial associations, 388; mutual assessment life, health and accident, 52; fraternals, 13; stock fire, 28; county mutual fire, 42; farm fire, 33; stock casualty, 32; Lloyds, 31; reciprocals, 5; title companies, 13; nonprofit hospitalization, 1, and exempt groups, mostly pension plans, 24.

Operating alongside these are some 662 companies domiciled in other states, with the stock fire and multiple-line carriers far out in front with 305. Next in line are 154 stock casualty companies, followed by 140 legal reserve life insurance companies. Other out-of-state companies licensed in Texas are: Reciprocals, 22; fraternals, 35; Lloyds, 1; title, 4, and mutual accident and health, 1.

Dallas far outranks other Texas cities in the number of home offices of insurance companies, and the picture is changing so rapidly that it is difficult to pinpoint the present status. For instance, at the end of 1951 Dallas was the home office city of 54 legal reserve life insurance companies and 31 stock fire and casualty companies; during 1952 a dozen more companies were added to its roster, including two that moved in from other cities; then in the first half of 1953—which witnessed a rash of new charters—Dallas became the home office city of 16 more companies, with three more added since July 1. This makes a grand total of 116, which includes several groups of two or more companies under the same management.

Houston has nearly 50 home offices; Fort Worth about 35, and San Antonio nearly 30. While Galveston is far down the list numerically with seven domestic companies, it is the home of the largest Texas life insurance company. Both Austin and Waco have about 12 companies each, according to the latest tabulation. In all there are more than one or more legal reserve life or stock fire and casualty companies in 32 Texas cities and towns.

The commanding position of life insurance companies in the Texas corporate set-up is further evidenced in business totals. As of the end of 1952 there was a grand total of $12,276,467,295 of legal reserve life insurance in force in the state, with about 60 per cent, or $7,378,050,913, written by out-of-state companies and the remainder, $4,898,416,382, in Texas companies. These same companies reported a total of $2,972,405,741 new business written in 1952 in approximately the same percentages.

Premium-wise, the life, accident and health and hospitalization companies are well in the lead on an estimated basis. The life premium income of Texas companies in 1952 totaled $229,769,086; in proportion, the out-of-state companies took in an estimated $347 million in life premiums, and the total A & H and hospitalization premius reached the imposing total of $101,293,778.

The automobile business now accounts for about 47.5 per cent of the $444 million of fire and casualty insurance premiums collected in Texas, and over the years its loss ratio has been favorable.

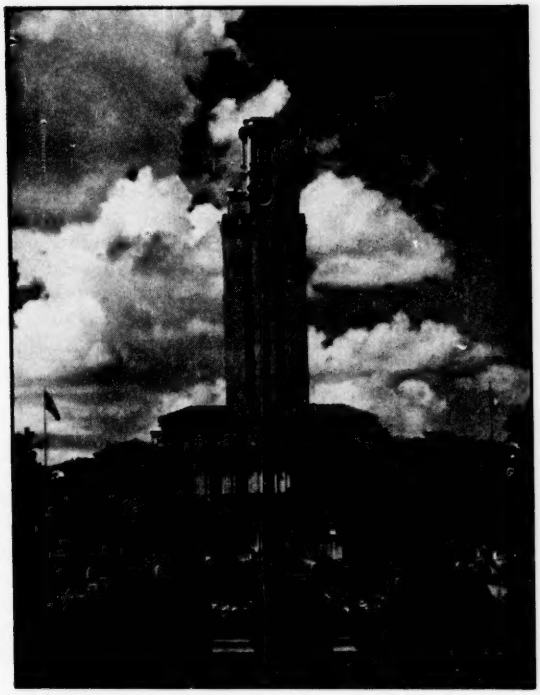
In premium volume, workmen's compensation insurance was in second place in 1952 with $68,421,100, an increase of about 12.5 per cent over 1951.

In 1952 for the first time the combined fire, windstorm and extended coverage premiums passed the $100 million mark for an aggregate of $105,467,190, comprised of $63,835,830 fire business and $41,631,360 windstorm and E. C. premiums.

Miscellaneous lines in both fire and casualty coverages account for an aggregate premium volume of $62,590,400, which includes some $14 million in inland marine lines and more than $6 million in ocean marine business.

At the end of 1952 total assets of the state's legal reserve life companies amounted to $1,422,407,172, an increase of just under $100 million in a twelve-month period. Available reports indicate that Texas stock fire and casualty companies experienced a slightly higher percentage gain in assets from the $249,548,-407 total shown in 1951.

Four of these life companies deserve special mention. First in size is the American National Insurance Co. of Galveston, with assets of $408,750,887 and life insurance in force of $2,588,024,146. Next comes the Southwestern Life Insurance Co. of Dallas with assets of $270,392,846; though it operates only in Texas, it passed the $1 billion mark of life insurance in force on the eve of its golden anniversary early this year. The Southland Life Insurance Co. of Dallas, which is currently undertaking an expansion program throughout its crescent-shaped territory from Maryland around to the Pacific Northwest, ranks third with assets of $158,-702,335 and insurance in force of $795 million. The fourth largest is the Great Southern Life Insurance Co. of Houston with assets of $136,196,765 and business in force of over $592,080,462.



Main building and Tower of the University of Texas at Austin.

EDUCATION

FOR nearly five years Texas has been in the throes of a revolution so well muffled that its impact has barely been audible even in neighboring states. The bombastic self-advertisement of Texas has become a world-wide legend. But when Texans awoke, only a few years ago, to the deficiencies of their public education system, they lowered their voices to a shocked and embarrassed murmur—and went to work.

The great turning point came in 1949, with the passage by the state legislature of a series of bills that became known as the Gilmer-Aiken Acts. The acts established a Central Education Agency to supervise the public schools of the state under the head of a unified administrative branch.

Over a sixth of Texas' school population, now more than 1,400,000, is made up of Negro students. Facilities and teachers devoted to their education have often been deficient in the past, but the condition of these 200,000 young Negroes has improved dramatically, especially since 1949. New construction of schools for colored has been disproportionately large in recent years, considering the ratio of colored to all students. Significantly, the increased educational opportunities for Negroes will prepare them for many of the more profitable trades and professions involved in the industrialization of Texas and the Southwest. Similarly, many Texans of Latin-American origin are broadening their horizons through the public education system.

Quantitatively, Texas high school graduates have broad opportunities to continue their education. There are more than 150 universities, colleges, and special advanced schools in Texas, more than a quarter of them for Negroes.

Largest school in the state is The Universary of Texas. At the Main University in Austin, twelve colleges and schools with fifty teaching departments require a teaching staff of more than one thousand. In addition to a broad range of academic work, the University offers scientific and technical programs that contribute directly to the current growth of industry and national defense. The National Defense Research Program has granted the University more than forty defense research contracts for projects concerned with the development of guided missiles, radar, microwaves, gunfire control, jet-engine construction, nuclear physics, and the like. A research staff of 235 full members and many more assistants takes part in such work as this. The Division of Extension of the University serves the entire state through numerous branches.

The University of Texas System, coordinated under general direction of a chancellor and board of regents, includes several other units. At the Medical Branch in Galveston, some 200 nursing students and 550 medical students are in training. In connection with the school, a new $14,000,000 hospital is nearing completion. About 380 additional medical students are trained at the Southwestern Medical School of the University, located in Dallas. The Dental Branch and Postgraduate School of Medicine of the University are in Houston, but the latter has branches in other cities, where physicians are provided refresher and specialized courses. Another unit of the University is the M.D. Anderson Hospital for Cancer Research, in Houston. Equipped to serve more than 2,000 patients annually, the hospital has installed a special radioactive cobalt therepy unit built by the Atomic Energy Commission.

Texas Western College, El Paso, is the farthest west of any branch of the University. It maintains a division of mines and engineering in addition to schools of arts and sciences, engineering, and a graduate school. Southeast of El Paso in the Davis Mountains is McDonald Observatory, owned by The University of Texas and operated jointly with the University of Chicago. The main telescope, 82 inches in diameter, is one of the most active in the world because of the unusually favorable climate and its freedom from city lights and smoke. At Port Aransas the University maintains the Institute of Marine Science, which carries on constant research on the marine life of the Gulf of Mexico.

Coordinate with The University of Texas System is The Texas Agricultural and Mechanical College System. The main college, near Bryan, is nationally famous for an *espirit de corps* matched by few if any other colleges. In addition to the main college, the A&M system includes Arlington and Tarleton State Colleges, Prarie View Agricultural and Mechanical College for Negroes, and several experimental stations and extension services. This system, like The University of Texas System, is coordinated under the direction of a chancellor. Landlocked A&M has recently established a department of oceanography to foster study of the sea, one of Texas' greatest potential resources.

There are eight senior colleges originally established by the state as teachers' colleges. All of them now

serve a more general purpose, but teacher training is still emphasized. They are: West Texas State College, Canyon; North Texas State College, Denton; East Texas State College, Commerce; Stephen F. Austin State College, Nacogdoches; Sam Houston State College, Huntsville; Southwest Texas State Teachers College, San Marcos; Sul Ross State College, Alpine; and the Texas College of Arts and Industries, Kingsville.

The Rice Institute and the University of Houston, both in Houston, are the leading privately endowed non-denominational universities in Texas. Each year The Rice Institute chooses about 400 applicants for its freshman class, exacting high scholastic performance but rewarding all students enrolled with free tuition. The University of Houston, a much larger institution, offers a wide choice of subjects on its campus, many of them in night school or in special adult classes.

Texas Technological College, Lubbock, once largely a regional institution now enrolls more than 6,000 students from 42 states and 17 foreign countries. Texas State College for Women, at Denton, known as a sister school to Texas A&M, prepares women for careers in homemaking as well as in a variety of professions.

Three of the more distinguished denominational colleges in Texas are Baylor University, Southern Methodist University, and Texas Christian University. Baylor, located in Waco, was chartered in 1845 by the Congress of the Republic of Texas. It now embraces ten schools and colleges, including the College of Medicine at Houston and the College of Denistry and Graduate Research Institute at Dallas. This university has recently emphasized a program of education in American civilization.

Southern Methodist University, in Dallas, annually enrolls more than 10,000 students in regular and extension courses. Particularly notable is the downtown branch of the university, where courses in adult education and advanced subjects are given emphasis.

Once an almost itinerant college, Texas Christian University was moved more than four times before it became firmly established in Fort Worth, its present home. With the growth of Fort Worth as an industrial and defense center, the technical courses offered at Texas Christian have assumed special significance.

Perhaps the outstanding trend in Texas higher education during recent years has been the increase in the number and enrollment of junior colleges. More than fifty years ago, Decatur Baptist College, at Decatur, was founded as the first junior college in the United States. Today, Texas has fifteen independent junior colleges for white students and thirty-three for Negroes, in addition to thirty-one publicly supported junior colleges scattered throughout the state.

RECREATION

IN Texas, everybody has fun. And if you find that hard to believe, come on down.

Texas runs the gamut, you see, in recreation, geography, climate and just about everything else. There's something for everybody—from the semi-tropical, palm tree-studded Rio Grande Valley to the harsh plains of the Panhandle.

Along the Guadalupe River near Kerrville.

To the east there are the piney woods and the swamplands. To the southwest you'll find the canyons, plateaus, mountains and desert terrain of the Big Bend and Old Mexico. In between, you'll see the Highland Lakes in the Hill Country above Austin, the rolling farmlands to the north, the vast ranch regions of South Texas, and the pleasure piers of the Gulf Coast.

And don't stomp your foot down hard anywhere, podnah', or you might find an oil gusher, too.

There may be gold underfoot, black or otherwise, but there's a million dollars worth of fun above ground.

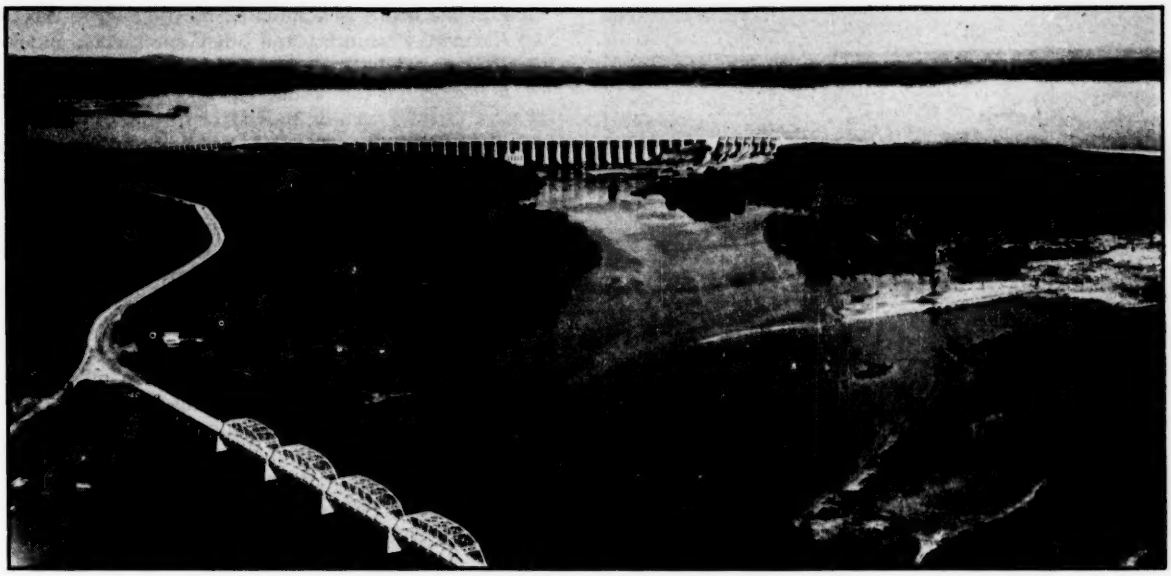
Perhaps Austin, backstopped to the west by the Highland Lakes and the Hill Country of Central Texas, stands most unique in this land of little water. From Austin 150 miles west up the Colorado River are a stairway of lakes—six of them.

The city is situated on the Balcones Escarpment, a vast fault line which virtually splits the great state in half. To the east, below Austin, are the farmlands, the backbone of Texas Agricultural production for generations.

But high on the tablelands of the Texas-New Mexico border the Colorado River is born. Its basin extends from there to the Gulf of Mexico, a distance of some 600 miles, but 93 per cent of the watershed area is above Austin.

That's where the Highland Lakes lie. They include (moving up-river) Lake Austin, Lake Travis, Lake Marble Falls, Lake Granite Shoals, Lake Inks and Lake Buchanan. That's a total of 76,040 acres and 118 square miles.

One filling of Lake Travis, for instance, will provide



Buchanan Dam, near Austin.

sufficient water for a city the size of Houston for 36 years. One filling of Buchanan would provide a city the size of Dallas for 17 years.

The six lakes each year bring thousands of visitors from all over the Southwest for camping, fishing, boating and hunting. Visitors find 11 improved public park areas on the lakes and numerous small public areas where picnicking and camping are allowed. Rental cottages, boat docks and other fishing facilities are provided, and among all this is the splendor of the Central Texas Hill Country and the Balcones Fault zone.

It wasn't always thus, however. Five main tributarial streams contribute to the flow of the Colorado above Austin—the San Saba, Concho, Llano, and Pedernales rivers and Pecan Bayou. Seasons of severe drought once brought only a trickle to the main flow. But just as common were short periods of extremely heavy rainfall when the river foamed and thundered, grinding out chasms, flooding farmlands and wearing down hills.

The river traverses almost every type of terrain peculiar to Texas—from the arid, rugged lands of West Texas to the lush plains of the Gulf Coast, a drainage area of 41,000 square miles.

The upper 11,000 square miles lie in the High Plain region of the Panhandle and do not contribute materially to the flow. Of the contributing watershed, 27,160 square miles lie above Austin and only 2,840 below. It is in the Edwards Plateau region that the great floods once originated.

Before flood control — before the Highland Lakes were born—almost all of the total stream flow of the river found its way into the Gulf of Mexico, unused, unsaved and unstored.

Through its operation of storage reservoirs behind the chain of six dams above Austin, the Lower Colorado River Authority today has harnessed the mighty river and turned it into a force for the benefit of millions.

There are other rivers, though, the Rio Grande, for instance, which has turned a semi-arid land into a lush playground.

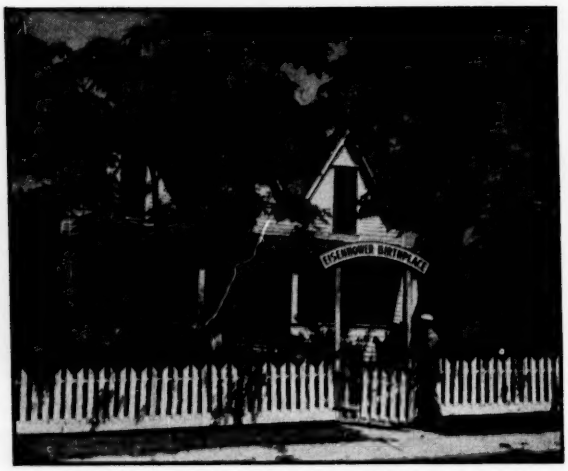
Starting in "The Valley," at the southmost tip of the state, the Rio Grande wanders past palm trees and orange groves, thatched huts and canneries, in its final 60 miles to the Gulf.

Mexico is just next door, but there's plenty for pleasure seekers on the Texas side, anything from hunting and fishing to deer-cabrito dinners and sunbathing in mid-winter.

Moving up the Gulf Coast, past the vast King Ranch and a 100-mile finger of sand called Padre Island, lie Corpus Christi and Galveston—a couple of profit and pleasure ports—and the gigantic Houston-Beaumont-Port Arthur industrial network.

Then there's Caddo Lake with cypress-spotted swamps on the Louisiana border and the "Big Thicket," the piney woods of East Texas. Along the northern border is Lake Texoma, backed by a body of water comparable to Boulder Dam, and in the Panhandle there's Palo Duro Canyon with its splendor of unique rock formations.

The Town Bluff Dam near Woodville is the first of four designed to give even flow to the Neches River.

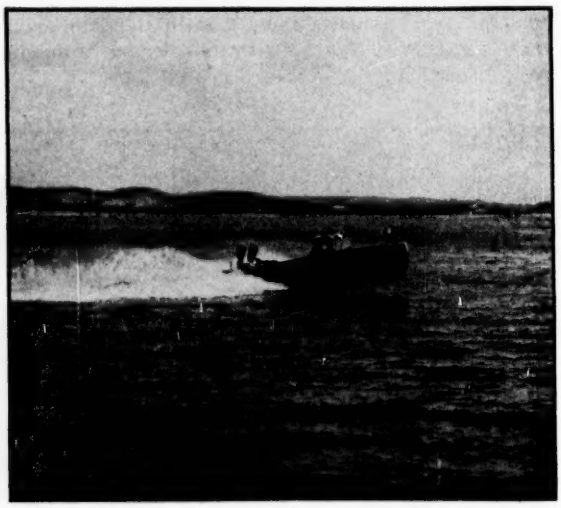


Preserved as a public shrine, the birthplace of President Dwight D. Eisenhower stands in Southeast Denison.

But if you came to Texas to see the real wild west, then Big Bend National Park is the place to go. It's a land of contrasts—semi-arid plains, gravel-covered slopes, arroyos and washes interrupted by massive mountain belts and the winding Rio Grande.

A unique celebration in Texas is the annual rodeo at Madisonville, which features a kid quadrille.

Located directly on the international boundary, the park typifies the scenery, the flora and the fauna of Mexico more than it does that of better known parts of the United States. From almost any section the view to the south is dominated by the rugged Sierra del Carmen, Fronteriza and other spectacular mountain ranges in Old Mexico.



Boating on the lakes near Austin.

This is where the wandering Rio Grande makes a great U-shaped turn on its course to the Valley. The principal development is the Chisos Mountains at an elevation of 5,400 feet.

The history of this region is divided into five periods —Indian (historic and prehistoric), Spanish, Mexican, the Texas Republic, and the United States. Archeological finds indicate that the area has been inhabited by man for centuries. Perishable remains such as baskets and sandals have been found in dry caves and rock shelters.

Animal life varies greatly in type and habitat. The wild hog, or Texas peccary (javelina), which ranges the foothills and slopes surrounding the Chisos Mountains, is one of the most unusual. Other large mammals include the Mexican black bear, mountain lion, beaver along the Rio Grande, deer and the common varieties of birdlife.

In certain localities the rock layers are highly folded, tilted and shattered. Some layers are standing on end, most are lopsided, and a few large sections of rock have been turned upside down and piled where it seems they should not be. Yawning canyons carved across slowly uplifted mountain ranges show the erosive action of the Rio Grande through the ages.

High in the Davis Mountains, 120 miles to the north of the Big Bend, is the McDonald Observatory, operated jointly by the University of Texas and the University of Chicago. Here, at an elevation of 6,828 feet, the absence of surrounding mountains and the very transparent atmosphere produce uniform conditions in the air. There's more sunshine and less rain at this point than any other in Texas.

If you're tired of the high and dry, and if it's deep sea fishing you like, then there are a number of ports dotting the Gulf Coast where a salt water enthusiast can vent his passion. The angling is good the year-round, and spots like Port Isabel (at the tip end of the Valley), Padre Island, Corpus Christi, Port Aransas and Galveston have fine tourist facilities.

The state is also blessed with plenty of dude ranches, rodeos, fiestas, caves, lakes and big and little cities for the visitor. There's spring in East Texas, for instance, or the Lost Pines of Bastrop, the winding Brazos River in Waco, the San Antonio River through the Alamo City or the Highland Lakes in the Hill Country of Central Texas.

And there are the cities—Dallas, chic and urbane; Fort Worth, where the west begins, and Houston, big, rich and noisy. The fresh water fishermen can dip their hooks in a number of big lakes, including Possum Kingdom west of Fort Worth, Lake Texoma on the Texas-Oklahoma border, Lake Corpus Christi near Mathis and Lake Whitney northwest of Waco.

And this is Texas—from the semitropics of the Valley to the stark plains of the Panhandle, from the lush greenery of Buffalo Bayou in Houston to the high and dry regions of the Davis Mountains near El Paso.

The state has everything, big cities and ghost towns, big rivers and dry forks, foothills and farmlands and the finest people you'd care to meet.

"Here's an Attractive Booklet for Your Telephone Numbers"

We've just printed a new booklet for listing your personal telephone numbers.

You'll find you save time on Long Distance calls when you give the operator the number you want. This booklet helps you keep the numbers handy.

There's a copy for you at the nearest Bell telephone office.

BELL TELEPHONE SYSTEM

SAVE TIME... CALL BY NUMBER

Use the booklet to write down the numbers you already know. If there's a new number you don't have—or an old one you've forgotten—be sure to add it to the list when the operator gives it to you.

Southerners

(*Continued from page 70*)

Temco Announces Management Appointments

In organizational moves made effective November 1, Temco Aircraft Corporation created four new management positions—two each at its Garland and Greenville plants—and combined two existing production posts at its Dallas plant.

The changes gave six company officials increased responsibilities.

The new offices also strengthen organization of the Garland and Greenville plants where facilities recently have been considerably expanded, according to Temco President Robert McCulloch.

Named plant manager at the Garland plant was William A. Tweedie, who has headed the plant since 1951 as factory manager.

Appointed plant manager at Temco's Greenville plant was Herrol W. Bellomy, who, heretofore, as general superintendent, supervised all operations at Greenville.

Elevated to assistant plant manager at Garland was John T. Butler, formerly chief tool engineer at Temco's Dallas plant.

Chosen for assistant managership at Greenville was W. N. "Buck" Hall, former Dallas plant superintendent of sheet metal detail fabrication and sub-assembly.

And at the Dallas plant, tool design operations—formerly under Mr. Butler—have been combined with tool planning and fabrication under Harold B. Ridgely who will retain his title of tooling superintendent.

Named to fill Mr. Hall's sheet metal superintendency at the Dallas plant was Doyle Beasley who formerly was assistant superintendent, in charge of night operations at Dallas.

Texas Eastern Appoints Two To Legal Department

Appointment of R. Clyde Hargrove, Shreveport attorney, as assistant general counsel for Texas Eastern Transmission Corporation and Keith M. Pyburn as attorney in charge of the company's Washington office, is announced by Chas. I. Francis, vice-president and general counsel.

R. Clyde Hargrove, a native of Shreveport, is a partner in the law firm of Hargrove, Guyton, Van Hook and Hargrove. For several years Mr. Hargrove has been handling important legal matters, including certificate and rate cases, for Texas Eastern.

Keith M. Pyburn was born in Dodson, Louisiana. He was graduated with the degree of Bachelor of Arts from Louisiana Polytechnic Institute in 1931 and was graduated with the degree of Bachelor of Laws from Tulane University in 1933. He was a partner in the law firm of Pyburn, Smith and Giddens prior to his employment by Texas Eastern. From 1937 to 1952 he was a partner in the law firm of Pyburn and Pyburn. During World War II he served in the army for five years, his last rank being that of major.

Newport Steel Names Boylan to Sales Post

Newport Steel Corporation, Newport, Kentucky, announces the appointment of John J. Boylan as Assistant General Manager of Sales. For three years Boylan had been Chief, Alloy Steel Section, National Production Authority, Department of Commerce, Washington, D. C. Before that he was Export Manager and in charge of agricultural implement steel sales for Crucible Steel Company of America.

John J. Boylan

American Mat Names Blood Southeastern Sales Manager

Charles B. Blood, 4097 Peachtree Road, Brookhaven, Georgia, has just been appointed Southeastern sales manager of the American Mat Corporation and D. W. Moor Company, according to D. W. Moor, president of these two companies at Toledo, Ohio.

Blood, previously identified with the hotel and restaurant equipment fields, has more recently been serving as a territorial manager for the American Mat Corporation and D. W. Moor Company.

He will cover the states of North and South Carolina, Alabama, Georgia, Florida and Tennessee with the complete lines of floor matting of the two companies. The industrial, commercial and institutional fields are served by the American Mat Corporation, with factories at Lima, Whitehouse and Wapakoneta, Ohio and Laporte, Indiana. Matting for resale is handled by D. W. Moor Company.

Republic Names Glenn To Public Relations Post

Appointment of Ray E. Glenn, Birmingham newspaperman, as public relations representative for the Southern steelmaking and mining operations of Republic Steel Corporation was announced recently in Cleveland, Ohio, by E. S. Bowerfind, Republic's director of public relations.

Glenn, former managing editor of the Birmingham *Post* and Alabama *News Magazine*, has been engaged in news writing and editing in Alabama since 1931. During the war he served as a public relations specialist for the Army Air Force.

In his new capacity Glenn will deal with public relations matters pertaining to Republic's operations in the Gadsden and Birmingham area. Glenn's office will be in Birmingham, where he will continue to live.

Pan-Am Southern Names Sartor To Head Land Department

C. Lane Sartor of Shreveport has been named Manager of the Land Department of Pan-Am Southern Corporation, President Bruce K. Brown announced recently.

Mr. Sartor succeeds G. P. Brown, who has resigned as Land Department Manager and Assistant Secretary of the corporation, effective October 15, 1953, to enter the oil business as an independent.

The Land Department is a unit of the Exploration, Production and Pipeline Division, headed by M. C. Hoffman, Vice President, with headquarters at 418 Market Building, Shreveport, La.

Mr. Sartor, who succeeds Mr. Brown, is a graduate in geology at Washington and Lee University. He joined Pan-Am Southern in March, 1950, after prior service with Barnsdall Oil Company as a geologist. Mr. Sartor has been serving as District Geologist for Pan-Am in Northern Louisiana.

U. S. Hoffman Machinery Names Morgan District Engineer

Peyton L. Morgan, Jr., has been appointed southern district engineer for the Air Appliance Division of the U. S. Hoffman Machinery Corporation, New York City. He will coordinate the activities and be responsible for application engineering in Virginia, West Virginia, Ohio, Kentucky, Indiana, Tennessee, Georgia, N. Carolina, S. Carolina, Alabama and Florida.

Morgan is a graduate of Virginia Polytechnic Institute and is a registered engineer. He joined the Hoffman company in 1948 as an associate of the Lynchburg, Va., representative and has held that position until his new appointment.

Hoffman's Air Appliance Division manufactures centrifugal compressors, pneumatic conveying equipment and industrial vacuum cleaning equipment.

come on in

the water's fine

and so is everything else in Arlington . . . only minutes from either Fort Worth or Dallas . . . a thriving community equally suitable for small business or the largest industrial plants . . . the people are ambitious, energetic and friendly . . . working and living conditions are unexcelled . . . and the weather's fine, too! So . . . if you are considering a new location for your business where there is opportunity unlimited . . . like General Motors, come to Arlington. You'll agree with us that it's the Greatest Part of a Great State. We know. We live here . . . we work here . . . and, WE LIKE IT!

ARLINGTON, TEXAS, CHAMBER OF COMMERCE

IS YOUR BUSINESS GOING PLACES?

★ You'll head for **TEXAS**, of course!

The Best Route is to

BEAUMONT, TEXAS

"Where Oil Flows and Industry Grows"

. . . and there's plenty of reasons why you should investigate Beaumont, Texas . . . if your business is going places. Some of the greatest industrial names in America have looked and stayed to grow and prosper in the heart of the Gulf South's new Frontier.

What are you looking for?

• PROXIMITY TO FUEL SUPPLIES

Ample reserves of natural gas are available in the Beaumont area, and can be delivered through a network of pipe lines. Natural gas may be contracted for as needed.

• ELECTRIC POWER

The continuous expansion program of the Gulf States Utilities Company, with home offices in Beaumont, keeps the supply of electric power well in advance of actual needs.

• AMPLE WATER SUPPLY

Fresh water for the Beaumont area can be supplied by the Lower Neches Valley Authority from the Neches River. A series of dams planned for construction along the upper Neches, one of which has already been completed, is designed to assure an adequate, uniform, year-'round supply.

• TRANSPORTATION

Beaumont is served by four railroads, ample trucking facilities and three air-lines. Ocean-going freighters and tankers regularly utilize the 34-foot channel from the municipal docks to the Gulf of Mexico, while the Intracoastal Canal affords a convenient and practical barge traffic route.

• SKILLED WORKERS

Lamar State College of Technology, located in Beaumont, and vocational training courses in the public schools assure a steady flow of technicians and skilled labor for industries in the area.

• EXCELLENT LOCATION

Desirable sites are available, some fronting on the Neches River and some adjacent to waterfront sites. Your inquiries are invited.

• A GOOD CLIMATE

The Gulf Coast climate is generally moderate, favorable for almost any industrial operation.

• NEIGHBORS

In Beaumont proper or within 30 minutes by automobile are located well-known institutions such as Bethlehem Steel, U.S. Steel, DuPont, B. F. Goodrich, Magnolia, Texas, Gulf, Pure, Atlantic, Sun, Mathieson, U.S. Rubber, and other companies.

WRITE US . . . ***for specific information of use to your business.***

VISIT US . . . ***we'll be glad to show you a great future for your company in Beaumont.***

BEAUMONT CHAMBER of COMMERCE

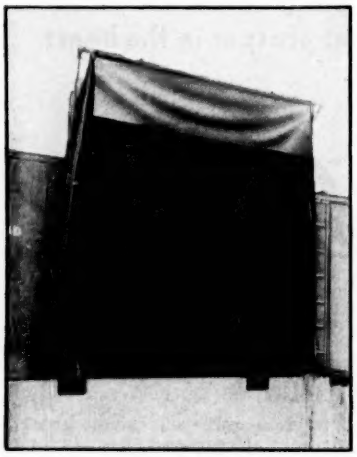
BEAUMONT, TEXAS

NEW PRODUCTS

Loading Dock Shelter

Atlas Industries, Inc., Chicago, Ill.—A new model shelter that is used when no loading dock is available. The model is mounted on a concrete abutment and provides complete protection to men and materials when unloading from a box car into a truck or vice versa.

Atlas points out that heretofore there was no practical method of affording protection for this type of loading situation.



Atlas Shelter

Atlas designed the shelter for efficient, assembly-line production (like all the company's standard units) which would still permit "individual engineering" to fit specific conditions of installation.

Solvent Spray Gun

John B. Moore Corp., Nutley 10, N. J.—The new model B-202-M siphon spray gun designed to draw cleaning fluid directly from a 55-gallon drum and eliminates lost time needed to refill small supply can reservoirs.

Many novel features of design suggest its use for washing aircraft, cleaning electric motor parts and stator-frames, engines and engine compartments and other mechanical equipment.

A die-cast handle, built to stand over 4 tons of shock, air-flow control valve on the haft to save trips to the air-supply regulator valve, ball-check to prevent fluid flow-back and adjustable lock-tip nozzle are features which appeal to those who work at shop floor level, as well as to those who work on scaffolding to clean aircraft, and hard to reach surfaces.

Cleanser Dispenser

Sugar Beet Products Co., Saginaw, Mich.—A new type of trouble-free mechanism for dispensing waterless skin cleansers.

With an absolute minimum of parts, continuously lubricated by the cleanser itself, this new dispenser is said to provide trouble-free usage. A two-way feed adjustment provides a choice of amount dispensed. The spout is of the no-drip type. The entire dispensing unit is constructed of heavy aluminum, with rigid mounting bracket an integral part of the dispenser. Rust-proof, the exterior is polished to a smooth satin finish.

The new dispenser is designed so it can be securely bolted for easy mounting on a wall or any other convenient surface. A special "throw-away" container provides easy filling—the entire container is simply lifted off and the new one slipped down into the dispenser housing. Each container provides from 1,000 to 1,500 washings, eliminating the need for frequent refilling.

Diamond Wheels

Super Cut, Inc., Chicago, Ill. — New type diamond wheel. This wheel does the work of diamond wheels selling for four times as much, according to its developers. From actual tests in some of the largest shops in the country, standard Super-Cut single layer diamond wheels gave an excellent micro-finish, and produced up to 4,900 single point carbide tools at a diamond wheel cost of less than 1¢ per tool!

Thus for the first time, all the recognized advantages of diamond wheel grinding are available without the heavy investment formerly required. Even small shops can enjoy the benefits of the finer diamond ground finish for carbide tools at a lower cost than abrasive belt grinding and without tying up the large investment normally involved in conventional diamond wheels.

The unique patented process under which this wheel is made accounts for its remarkable performance.

Pipe Machine

The Oster Manufacturing Company, Cleveland, Ohio—A completely new, low cost, 4″ pipe machine— the No. 784 "Thrift Model."

The No. 784 is a heavy duty, fabricated steel constructed floor type pipe machine, with a standard range of 1″ to 4″ and an extra range of ½″ and ¾″.

It is equipped with a front chuck which requires no wrench for operation, and is ideal for frequent changes of pipe sizes, because a spin of the hand wheel moves the gripping jaws through the entire range in a few seconds. Rear centering chuck is quick acting and non-binding. This rear chuck, together with extra long spindle provides maximum pipe support, prevents whipping and assures straight threads on long lengths.

A magnetic starter with push-pull selector switch for run and jog, controls the heavy duty, 1800 R.P.M. 3 H.P., motor.

Instant Bag Opener

R&M Products Co., P.O. Box 485, Gainesville, Ga.—With this recently patented Instant Bag Opener you can now open easily, bags of feed, seeds, flour, fertilizer, etc., sewed with a chain stitch. No more time-consuming, temper-raising operations of trying to open bags with knives, or other dangerous objects.

With the Instant Bag Opener—a flick of the wrist—the bag is opened, as the stitch is released instantly—no cut bags or fingers! Also useful for raveling empty bags, which are to be used for making clothing or needlework art.

Artistically designed to fit your hand, made of light-weight, tough, durable red plastic and surgical steel, with attached gold-colored chain, and boxed with instructions.

Aluminium Ladder

Louisville Ladder Company, 1101 West Oak Street, Louisville, Kentucky—A new addition to its line of industrial step ladders.

Made of extruded aluminum side rails and steps these ladders fill a need for a reasonable weight step with better than average strength and stability features. Extra sturdy back legs are heavy channel sections with reinforced braces. Front legs are securely braced on both sides of the step. Steps are double riveted on the front facing. All features designed to meet the requirements for a ladder subject to heavy duty service.

Industrial Ladder

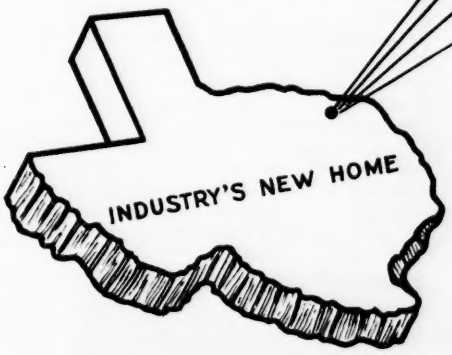
In addition all hinge points are reinforced with additional metal plates, secured with cadmium plated steel rivets. Heavy duty corrugated rubber pads applied to all floor contact points. Saw tooth serrations on steps provide unusual slip-proof protection.

Currently producing sizes of 4, 5, 6, 7, 8, and 10 feet with pail shelves omitted on the first two sizes. Will be available in the 12 foot size shortly.

(*Continued on page* 118)

CHOOSE
A SMALL TOWN

BONHAM
TEXAS



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LABOR MARKET
(51,000)
ABUNDANT WATER
MARKET PROXIMITY
PLANT SITES
POWER
COOPERATIVE ATTITUDE

LARGE OR SMALL

BONHAM INDUSTRIAL FOUNDATION
IS INTERESTED

Acquired 3 New Industries in 1 Year . . . *Why?*

CONTACT
Bonham Chamber of Commerce
BONHAM, TEXAS

Oil money *helps*

In 1952, the value of the crude oil and natural gas produced in Texas was nearly $3 billion.

That is a lot of money. It pays taxes, salaries, and wages; it goes to landowners for royalties and lease payments; a sizable portion of it will be reinvested in the further development of the State's rich petroleum resources.

Furthermore, it is *productive* money. Some part of it finds its way into the pocket of practically every Texan. There is a portion of Texas' oil and gas income in the dollar a wife spends for groceries, in the check a husband writes for rent. Oil and gas money helps to meet payrolls, pay doctors' fees and hospital bills, buy new farm equipment, send sons and daughters off to school.

Oil and gas money helps on every hand. It is a resource from which all Texas benefits.

HUMBLE

HUMBLE OIL & REFINING CO.

$784 MILLION DOLLARS IN HIS POCKET!*

MORNINGS! EVENINGS! SUNDAYS!

We're on the job SELLING in this rich market in the TEXAS PANHANDLE!

*NET BUYING INCOME FOR 40 COUNTIES IN THE AMARILLO TRADING ZONE INCLUDING 3 COUNTIES IN OKLAHOMA-4 COUNTIES IN NEW MEXICO!

SALES MANAGEMENT, MAY 10, 1953

AMARILLO DAILY NEWS
AMARILLO GLOBE-TIMES
AMARILLO SUNDAY NEWS-GLOBE

Represented Nationally By TEXAS DAILY PRESS LEAGUE, Inc.

NEW PRODUCTS

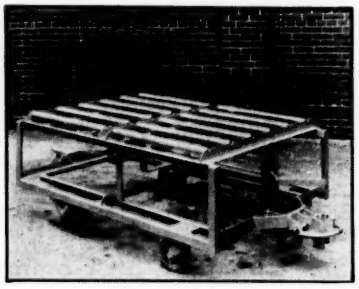
(*Continued from page* 116)

Roller Top Trailer

Mercury Manufacturing Company, Chicago, Ill.—A new roller top, caster steer trailer.

Designated as type A-308-78M, this 3,000 lb. capacity trailer features two roller conveyor sections at a height of 30 in. from the floor. It was designed to fit into standard conveyor lines to permit the pick-up and transfer of packaged units.

Trailer's live deck is made up of two six-roller sections. Rollers have 1.9 in. diameters and are 30 in. long. Platform size is 49 by 72 in. Unit rolls on rubber



Mercury Trailer

tired wheels—8 by 2½ in. on the front, 10 by 3 in. on the rear. Trailer is equipped with Mercury safety self couplers.

In operation, cartons or cases coming down conveyor line automatically load themselves onto trailer by riding over rollers. They are locked in proper position when brakes to retain the rollers are applied. This trailer, designed to take two packaged units, eliminates the need for fork trucks at discharge points of conveyor and pallet loader lines.

Spot Welding Gun

Air Reduction Sales Co., 60 E. 42nd St., New York 17, N. Y.—The Aircospot Gun, a new development by Air Reduction, is now available to industry. This light weight spot welding gun uses a 3/32" non-consumable thoriated tungsten electrode and an inert-gas shield. It makes instantaneous welds on stainless steels, mild steels and alloy steels, without the aid of jigs or fixtures.

The Aircospot unit consists of a hand gun, control panel and all necessary hose and cable assemblies. In order to use this equipment, a standard D. C. power source, either motor generator set or rectifier type of machine, is required. The gun is water-cooled, and uses helium or argon, or a mixture of the two, for a shield. High frequency is not required. The Aircospot gun is rated at 250 amperes and welds may be made on sheet metal up to ⅛ inch in thickness. The bottom section can be of greater thickness. In most cases, a back-up plate is unnecessary.

High Pressure Fan

Hartzell Propeller Fan Co., Piqua, Ohio—A new high pressure fan which is effective against pressures as high as 4". The new high-pressure fan is available in 28", 36" and 48" models.

A new propeller developed in the Hartzell research laboratories enables this fan to move more air against higher pressures than is possible with a propeller-type fan of conventional design. In all other details the new fan is exactly like the standard Hartzell fans whose efficiency and reliability have been proved in thousands of industrial installations. It features the Curved Orifice Air-Seal Ring, which increases air deliveries 10 per cent or more by eliminating backflow of air at the propeller tips.

The sturdy, vibration-absorbent motor mounting is streamlined to minimize obstruction of the airstream. Ring and mounting are fabricated of low carbon steel. The propeller is sand-cast aluminum, machined, ground, and polished to a high finish.

(*Continued on page* 120)

VIENER METALS

ESTABLISHED 1907

HYMAN VIENER & SONS
P. O. Box 573
Richmond, Virginia

ALUMINUM ALLOYS • BABBITT METALS • BRASS INGOTS
PIG and CAULKING LEAD • LEAD ALLOYS • SOLDER METALS
TYPE METALS • TIN AND TIN ALLOYS • SLAB ZINC

Specification Non-Ferrous Metals and Alloys

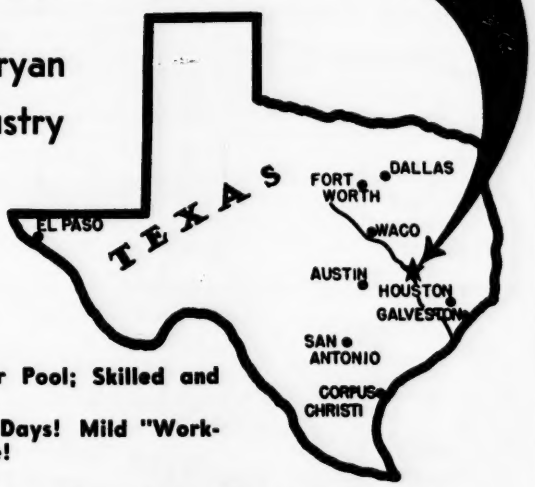
"YOUR DEPENDABLE SOURCE OF SUPPLY — VIENER METALS"

The
INTERNATIONAL SHOE CO. *Chose* BRYAN

5 Reasons Why Location In Bryan Means Extra Profits To Industry

- **Good Industrial Sites on 2—Railroad Lines!**
- **Low Cost Utilities—Natural Gas and Utilities!**
- **Adequate Water Supply of Highest Quality!**

100 miles to America's largest shipping port—Houston . . . the heart of Texas' 7-billion dollar market . . . ample housing . . . top living conditions . . . add up to BRYAN . . . a top industrial location.



- **Large Labor Pool; Skilled and Unskilled!**
- **75% Clear Days! Mild "Working" Climate!**

For A Complete, Concise Resume of Bryan's Features, Write The

Bryan Chamber of Commerce

602 VARISCO BLDG. BRYAN, TEXAS

three strong players on Amarillo's team

AMARILLO CLEARING HOUSE ASSOCIATION

AMARILLO TEXAS

NEW PRODUCTS

(*Continued from page* 118)

Hole Punching System

Wales-Strippit Corp., 345 Payne Ave., North Tonawanda, N. Y.—The new Wales Patented Multiple Hole Punching System with punch Retainer Plates for unlimited hole punching patterns.

This system provides a simpler, faster, more convenient and economical method of punching holes in sheet metal parts by permitting the entire setup to be made outside the stamping press or press brake. In addition, the Wales Punch Assemblies and Dies are interchangeable, permitting the same parts to be used and reused in an infinite number of setups. This feature makes possible a minimum inventory of parts.

Wales Multiple Hole Punching System is available two ways: (1) All individual parts are available for users to stock for assembling hole punching set-ups. This permits making and putting into operation a hole punching die the same day a templet is completed. (2) Wales-Strippit will build the complete hole punching assemblies ready to operate and will guarantee the accuracy of the hole locations.

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★ **BETTER FLOW**—Tex-Vit Glass Lined Pipe boosts runoff. Ceramic lining and fewer joints help speed flow.

★ **EASIER INSTALLATION**—Longer lengths mean fewer joints to make, lower handling and installation costs.

★ **GREATER STRENGTH**—Ceramic lining adds still more crushing and load-bearing strength to Tex-Vit Pipe.

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TEX-VIT CLAY PRODUCTS

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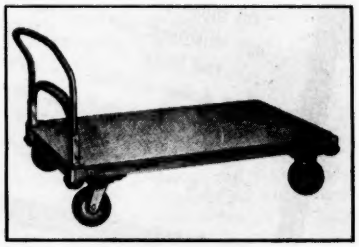
TEXAS VITRIFIED PIPE CO.

Magnesium Truck

Magline, Inc., Pinconning, Michigan—A new, all-magnesium, 4-wheel platform truck for general materials handling use. Believed to be the first unit of its kind to be mass-produced of magnesium, the new truck is offered in ten different models, each weighing only 1/4 to 1/3 as much as comparable equipment of similar size. All trucks in the series are capacity rated to handle loads up to 1,000 lbs.

Many design improvements have been incorporated in the new truck to provide the user with greater serviceability and longer truck life. All parts are standard and replaceable, thereby lengthening equipment life and reducing maintenance expense. Handles are reversible and may be installed at either end of the platform. The handles are also interchangeable and can be replaced with special racks or superstructures for multi-purpose truck use.



Magline Truck

According to the manufacturer, the combined advantages of magnesium-lightness and magnesium-strength contribute to greater materials handling efficiency, reduce physical fatigue, and encourage greater productivity.

Metal Remelter

The Nolan Corporation, Rome, New York.—The improved Metal Remelter and Meltevator . . . an automatic loading device which renders the remelting operation almost entirely automatic. Nolan's outfit is now a complete, compact, self-contained unit for remelting of soft metals such as babbit, solder, tin, zinc, lead and lead alloys.

Square in design, the Nolan Furnace requires less floor space than the conventional round type and is more easily adapted to fit a given area. The bottom-pouring spout, loading cover and accessories such as power agitator, hand pumps, water-cooled ingot molds, loading device, etc. may be located on either side, or rear to meet special requirements. The standard unit is complete and

(*Continued on page* 122)

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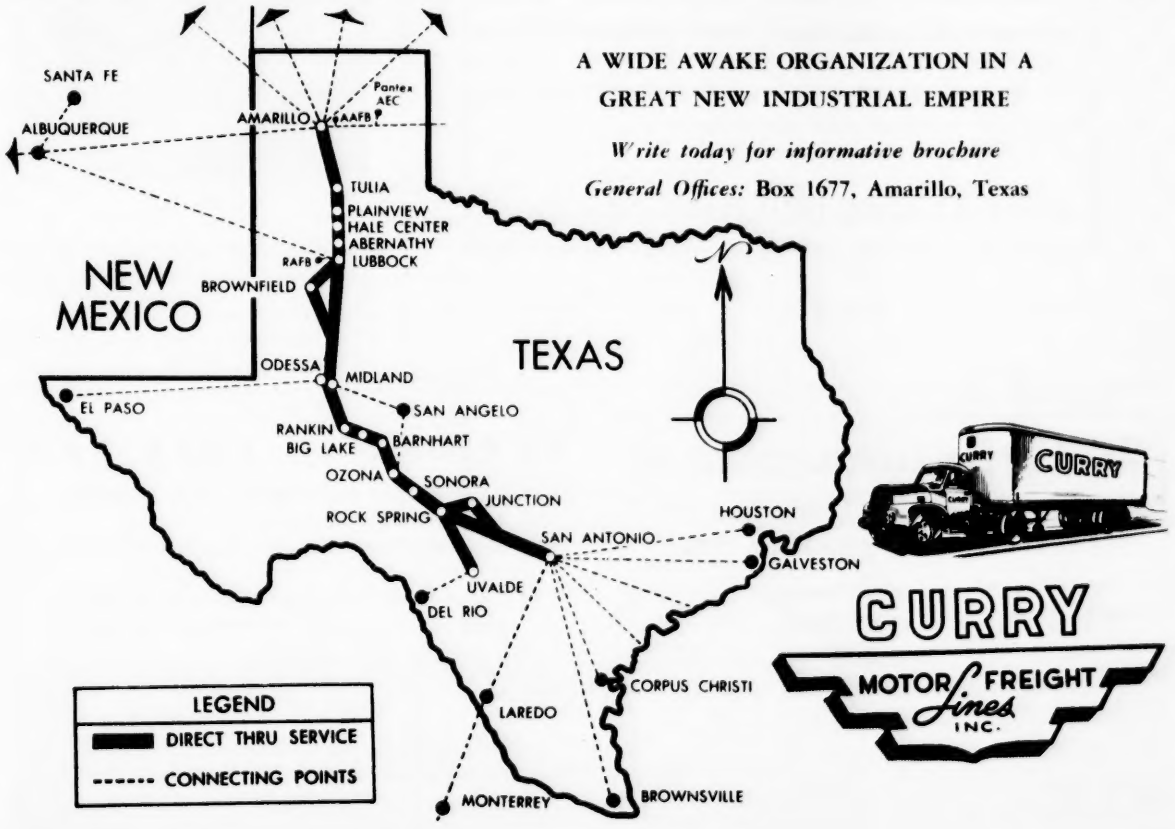

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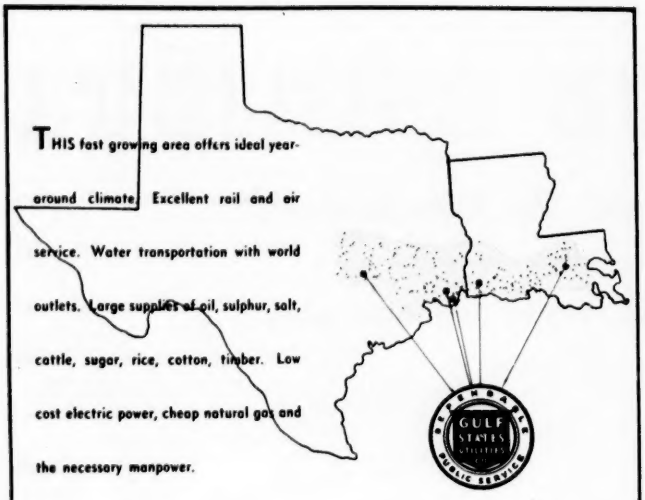

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Letters of inquiry concerning these advantages and the electric service which we furnish are invited. Engineers and other trained and experienced personnel are available to assist in starting a new plant, relocating an existing plant or expanding present facilities.

Division offices are located at Baton Rouge and Lake Charles, Louisiana, Beaumont, Port Arthur and Navasota, Texas. Inquiries concerning local resources and electric service availability may be addressed to these offices.

GULF STATES UTILITIES COMPANY

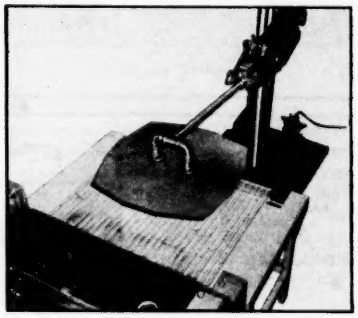
NEW PRODUCTS

(*Continued from page* 120)

compact, equipped with hinged cover, ventilating pipe connection, bottom draw-off valve with swing spout and heating equipment. It may be heated by electricity, oil or any type of gas desired. Although regularly furnished for temperatures up to 850° F., these Furnaces may be equipped to give any necessary temperature up to 1000° F. Automatic temperature control and pre-heating time switches are optional features available at small cost. When desired, the Furnace may be supplied without the bottom pouring valve for plants where hand ladling or pump casting is required. Standard models are available with pot capacities from 600-lbs. to 5-tons, and special models having greater capacities are available on special order. Furnace design may be square, rectangular or round.

Automatic Vacuum Lift

Union Tool Corporation, Warsaw, Ind. —A new Union Automatic Vacuum Lift. It contains its own vacuum plant and is shipped completely assembled, ready to



Union Lift

hook into electric power and air line. It will handle any nonporous metal sheets up to 40″ x 40″; will handle from one to six sheets per minute.

This machine will pick up at any level from floor to 36″ height.

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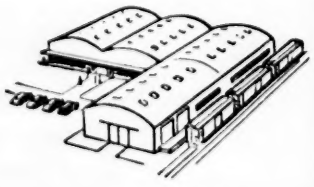

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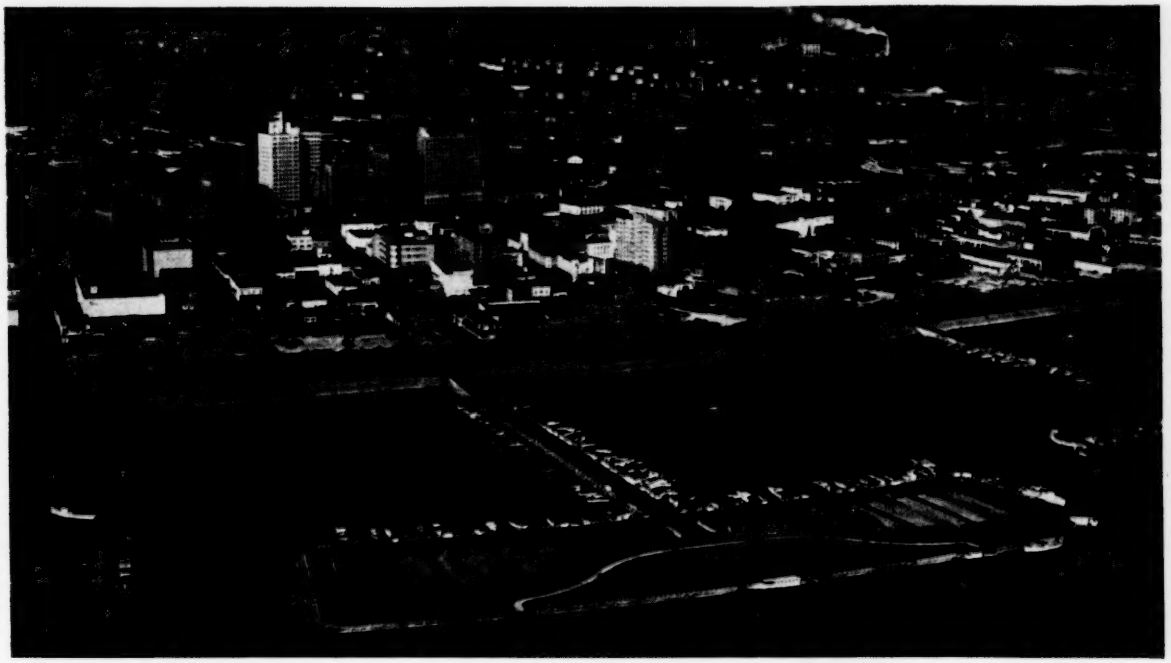

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Choice industrial sites on deep-water (served by the Port of Corpus Christi) assure ample plant space, low transportation costs, access to dynamic nearby markets.

CORPUS CHRISTI OFFERS A GOOD LABOR SUPPLY

The city and area are populated by alert, hard-working people who have proven ability to learn skilled trades.

CORPUS CHRISTI OFFERS RAW MATERIALS

Within the Corpus Christi area are concentrated tremendous reserves of natural resources and other vital industrial raw materials.

CORPUS CHRISTI OFFERS CHEAP FUEL

Natural gas and electricity power the wheels of industry in Corpus Christi. Industrial rates are among the lowest in the nation.

CORPUS CHRISTI OFFERS MILD CLIMATE

A popular year-around resort city, the climate has many industrial advantages. Work goes on the year 'round. There are fewer lost work-days from sickness, bad weather.

CORPUS CHRISTI OFFERS PROOF

In less than 20 years, more than $250,000,000 has been invested in Corpus Christi by some of the nation's best known industrial firms. Each is growing and prospering with this great Texas Gulf Coast City.

Find Out What Corpus Christi can mean to You and Your Industry, Write:

The BOARD of TRADE : Port of Corpus Christi

217 HACKLEY BUILDING, CORPUS CHRISTI, TEXAS

Research

(*Continued from page* 59)

research progress at frequent intervals and to suggest promising directions of work. Reports covering the results obtained are rendered monthly, quarterly, or otherwise as seems most desirable.

Present-day technology has become extremely complex, and the total of accumulated facts concerning it is enormous. Hence, the satisfactory solution of an industrial problem may require the services of experts in a number of diversified fields. This may apply to an apparently simple problem. Also, industrial research necessitates the use of costly scientific apparatus together with extensive laboratory equipment of the usual types. To build, equip, and staff a laboratory, or to expand an existing one to handle a particular research job, may involve more money than a company feels justified in spending.

In these cases, a ready solution is afforded at moderate cost by the industrial research institute. It has available the personnel, equipment, and research know-how. The sponsor has only to contract for the research wanted. He is not concerned with hiring a technical staff, buying equipment, or managing a new department.

The success of the institutes is attributed in large part to the cooperative method by which their specialists solve problems. Institute staffs comprise hundreds of full-time individuals having training and practical experience in a long list of technologies. Thus, the staffs include metallurgists, mechanical engineers, chemists, geologists, physicists, electrical engineers, ceramists, mathematicians, fuel engineers, economists, biologists, and specialists in practically all branches of industry and science. Accordingly, experts are available for work on any technical subject. The sponsor's problem is assigned to the division or individual best qualified to handle it. Any member of the staff may be called on for advice or information.

A research contract may be advantageous to manufacturing companies and others under a variety of circumstances. Particulars may be obtained from the institutes.

Int. Minerals Reports On Feldspar Dept. Expansion

International Minerals & Chemical Corporation is making substantial progress in the expansion program of its Consolidated Feldspar Department in the Industrial Minerals Division, Norman J. Dunbeck, vice president in charge of the division, announced early this month.

In addition to planning three new plants, existing equipment is being enlarged and brought up to date. Power equipment, such as shovels, bulldozers and trucks, is being replaced with new and larger units. Dust collecting and water clarification systems are being installed. Flotation capacity of Spruce Pine, North Carolina, has been increased by 50 per cent, and new fine-grind facilities installed at Erwin, Tennessee.

The main quality-control laboratory at Kona, North Carolina, has been revised and enlarged. New research projects have been started for the Feldspar Department by International's Research Division, and two other such projects have been assigned to outside laboratories.

Regarding the new plants, Mr. Dunbeck explained that diamond drilling has been completed on International's extensive reserves of feldspar ore in southern Connecticut. Plans are being drawn for a feldspar plant there which will probably employ the LeBaron-Lawver dry beneficiation process, resulting in substantially lower production costs than in conventional methods of beneficiation.

Diamond drilling is also underway on International's nepheline syenite properties in southern Ontario. It is expected that a new, modern mill for processing this material will be built at Blue Mountain, Ontario, and should be in operation by the middle of 1954.

"These two new units in Connecticut and Ontario are part of a long-range plan, and it is expected that a third large unit, a feldspar plant, will be constructed within about one year," Mr. Dunbeck stated.

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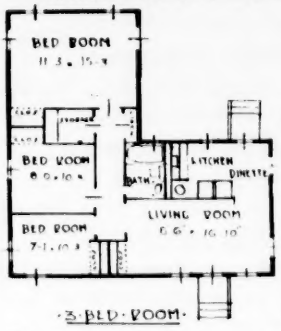

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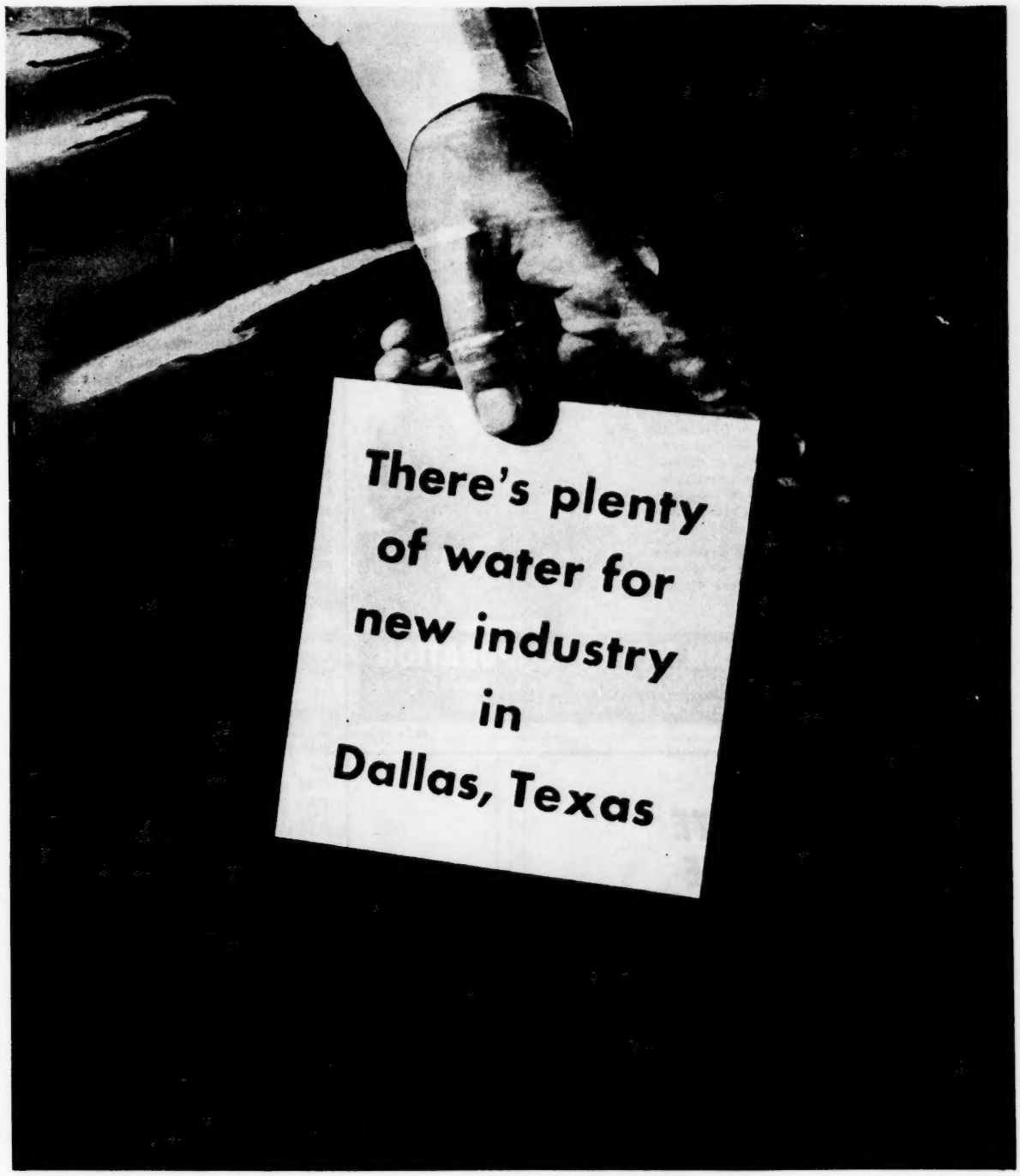

Considering a new plant-site? Remember this:

Growing, dynamic Dallas anticipated industrial growth; planned ahead with new water reservoirs. Two major lakes have just been completed — a third is near completion.

These new projects — costing about $58,920,000 assure Dallas of a long-range water supply for industry.

Our industrial department will gladly rush you the facts on Dallas water supply, plus any other plant location data you request. Write: *Industrial Department, Dallas Chamber of Commerce, 1101 Commerce Street, Dallas, Texas.*

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Those big rubber-tired wheels *up front* are there for a reason. Wheels permit fast handling over rough ground, also help relieve weight strain on weak floors. Carmichael Speed Lift is built by Texas Metal and Mfg. Co., Inc., Dallas, Tex., powered by a Wisconsin Heavy-Duty Air-Cooled Engine.

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Industrial Boom Reported In Oklahoma City

A total of $32,158,000 was invested in new manufacturing and service concerns and in expansion projects by those already in existence in Oklahoma City during the first six months of 1953, a report to the Chamber of Commerce directors has revealed. This figure did not include expansions at the state's largest industrial unit, Tinker Airforce Base.

Of the total expenditure, $9 million represented money spent by twenty-eight established manufacturing concerns in enlarging their plants and in extending their operations.

Initial investments totaling more than $2 million were made by twenty-four new industrial and manufacturing plants which were established in the city.

Nearly $17 million was invested in the Oklahoma City area by fourteen service establishments. This included more than $3 millions spent by the Bell Telephone Company to extend lines and improve service, and $222,000 spent by Oklahoma Gas and Electric Company on its Belle Isle power plant. Construction firms, appliance houses and transportation lines have also spent money for expansions in order to give better service.

The report listed, in addition, other factors which have boosted the Oklahoma City payroll. These included location of the Republic Steel head offices in the city; completion of the new Veterans Hospital; construction of a modern merchandising center by Sears, Roebuck; new and enlarged units at the Municipal Air Terminal, expansion of Robberson steel operations; and expansion of post office facilities.

N & W Testing Thawing Device

Norfolk and Western Railway Company is utilizing short lengths of wrought iron pipe in a new car-thawing application designed to thaw coal frozen in open hoppers in cold weather.

The "pilot model" of the device, a development of the Railway's engineering department, is installed at the company's coal loading pier at Lamberts Point, Virginia. It performed satisfactorily in speeding up unloading operations when tested for a brief two-week period last winter.

In the car-thawing application, 24 lengths of 4-inch pipe are cut into small pieces and installed near ground level between the rails. Prior to installation, the top half of each pipe is drilled with holes and a gas-fired jet inserted in one end. The compact heating units are then located in double rows at the center of the road bed.

When the device is operating, heat from the jet is projected upward through the perforated area and helps melt the ice formations that otherwise keeps coal frozen in the hopper and prevents prompt and efficient unloading operations.

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Tulane University Forms Engineering Research Institute

The formation of an Engineering Research Institute at Tulane university, to serve the needs of the expanding industry of this area, has been announced by Dr. Rufus C. Harris, president of Tulane.

Dr. Harris said the institute would contract with industrial firms for specific research projects involving practical problems in numerous fields of engineering science.

About 20 faculty members of the school of engineering will take part in the work of the institute, he added, with physicists, chemists and other specialists from various divisions of the university available as consultants on the projects.

Dr. Raymond V. Bailey, head of the department of chemical engineering, was named head of the institute, to work under the general supervision of Dr. Lee H. Johnson, dean of the school of engineering.

Dr. Bailey described the institute as a "formal, well-organized unit for sponsored research."

"There are innumerable engineering problems needing investigation in this area," he explained. "In the construction of offshore drilling structures, for example, or of port facilities on the Mississippi river, there are factors which are not found elsewhere and which have not been adequately studied.

"More efficient methods are constantly being sought in the chemical, petroleum, sulphur and other industries centered in the vicinity. All types of manufacturing have engineering problems to be solved."

The institute will offer research services in more than 20 specialized fields such as fluid flow, heat transmission, analog computations, electronics, prestressed concrete, stream pollution, illumination, metallurgy and others, Dr. Bailey related.

Although many research projects are presently under way in the school of engineering, these have been mostly undertaken by individual faculty members. Dr. Bailey explained that establishment of the institute will allow projects involving broader studies, cutting across the lines of specialists and even involving departments in other schools and colleges of the university.

Each project will be organized under the direction of a faculty member who is a specialist in the indicated field, he said, and other faculty members and graduate students will be assigned as the size and nature of the problem may require.

In addition to providing research leading to new solutions of practical engineering problems, Dr. Bailey pointed out, the program will promote the development of graduate instruction in the school by furnishing research fellowships for advanced students.

He said the institute would provide services for the many small industries of the area which do not find it feasible to maintain research staffs, as well as for larger industries which have such staffs but which require additional help from time to time.

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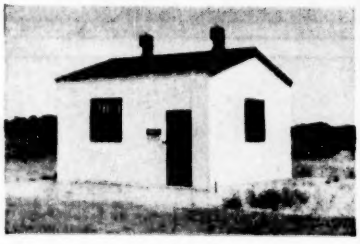

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Armco Series S Buildings, with unique STEELOX construction, offer sizes from 4 by 4 feet to 40 feet wide by unlimited length.

Armco Series P Buildings, built of steel framework covered by corrugated metal sheets, satisfy requirements for larger structures. Widths are from 20 to 100 feet in clear spans with unlimited lengths.

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ARMCO STEEL BUILDINGS

LOF Fiber Glass Names St. Louis District Manager

Rapid development of the market for fiber glass in the St. Louis area is forecast in the announcement of the establishment of a district sales office of the Fiber Glass Division of Libbey-Owens-Ford Glass Company with Arthur S. White as the new district manager.

Mr. White for some time has been associated with the Chicago office but actively working in the St. Louis territory which includes seven states and parts of two others.

The new district sales office will be at 411 North Seventh Street, St. Louis, closely associated with the Libbey-Owens-Ford offices, it was announced by C. F. Hegg, general sales manager of the LOF Fiber Glass Division.

In the St. Louis-Kansas City industrial area, and adjoining southwestern states, Mr. White will work closely with aviation, electrical insulation and refrigeration industries as well as industrial textile outlets for fiber glass.

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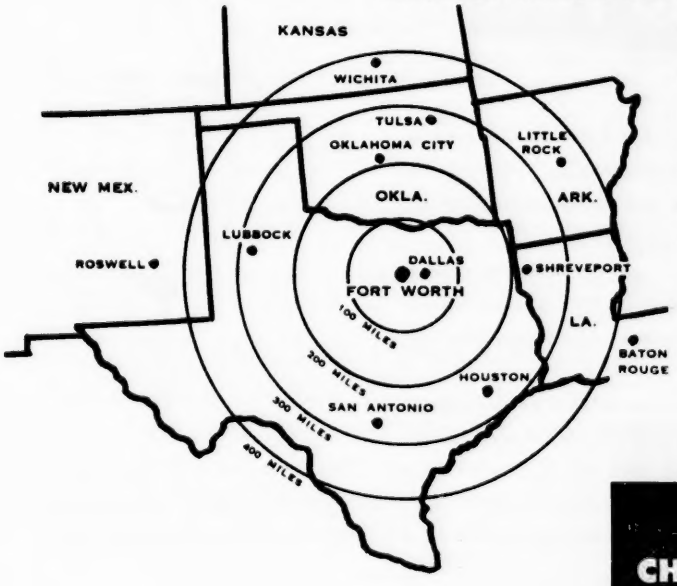

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FORT WORTH CHAMBER of COMMERCE

FORT WORTH, TEXAS

Republic Is Leader In "Light" Steels

Republic Steel Corporation's specialization in "the growth steels of tomorrow" forecast a promising long-term future for the company, according to a special report released last month by the company.

The report was prepared for customers, employees, stockholders and others interested in the company to bring them up-to-date on steps taken by the company in recent years to supply broader markets for steel.

The lighter forms of steel, according to the report, have risen from a 50% share of the national steel production in 1926 to 64% in 1950. Light steels, a relative term, embraces the steels utilized for ultimate consumer goods purposes, apart from the "heavy" rails, plates and structural shapes. It is in these so-called "light" steels and alloy steels that Republic specializes.

Steady growth, climaxed by a more than $75,000,000 expansion program at Cleveland in 1952, has seen the corporation increase its annual ingot capacity to 10,262,000 tons from 5,564,000 tons in 1931, the first full year of Republic's operations. As a result, Republic today is the nation's largest producer of "light" steels.

Concurrently, it has taken the broadest steps in the past year to diversify its production.

One of the more significant was its commercial entry into a new field — titanium. Only 56% as heavy as alloy steel, yet comparable in strength and corrosion resistance, titanium is of particular importance at present for aircraft production.

Reichhold Announces Expansion Program

A ten million dollar over-all expansion program for Reichhold Chemicals, Inc. was announced recently by Chairman of the Board Henry H. Reichhold, following the first directors' meeting held in the company's new executive offices.

The program calls for the improvement and enlargement of production facilities in all twelve of Reichhold's domestic plants with an eye toward producing basic chemicals and selling them to industry, Mr. Reichhold said. Such products as phenol, maleic and phthalic anhydride, formaldehyde and pentaerythritol will be manufactured by RCI to augment its outside purchases.

Inaugurating the program will be a three million dollar expansion of Reichhold's Tuscaloosa (Ala.) plant for the production of five million pounds of pentaerythritol for the first time and thirty million pounds of formaldehyde, both components of RCI's synthetic resins. One of the major uses of the chemicals will be in alkyd resins for surface coating materials, of which Reichhold is the world's largest producer.

Alkyd resins are composed of polyhydric alcohols, such as pentaerythritol or glycerine; phthalic and/or maleic anhydride; phenolics and various vegetable oils or fatty acids. They are now used mainly as a base for decorative and industrial surface coating materials. Reichhold already produces phthalic and maleic anhydride and phenol.

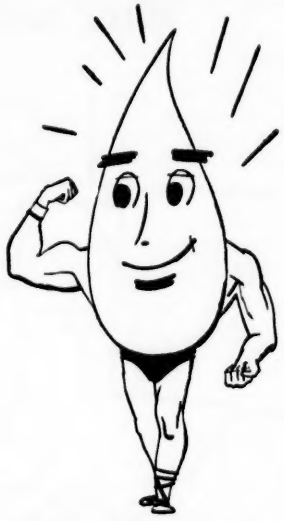
P. J. Ryan, vice president in charge of Reichhold's Southern Division, said that the Tuscaloosa expansion would benefit the plywood, pulp and paper, and foundry as well as the paint industries in the deep South and Gulf area. Reichhold has anticipated the needs of these industries, Ryan added.

Mahon Publishes Picture Story

"A Picture Story of The R. C. Mahon Company." A 46-page, two-color, profusely illustrated book designed to portray the company's extensive metal fabricating and production facilities, its products and services, and its capacity to serve industry, has been produced by The R. C. Mahon Company, 6565 E. Eight Mile Road, Detroit 34, Michigan.

In this book, the activities, products and production methods of the Eight Divisions of the Company are treated separately. It unfolds a picture story of the company's over-all operation which is not only very interesting and impressive, but highly educational as well.

more power to you!



No better index to the industrial "health" of any region may be found than its fuel consumption. Industry in Texas uses annually more than 600 *billion* cubic feet of natural gas alone to power its plants and mills!

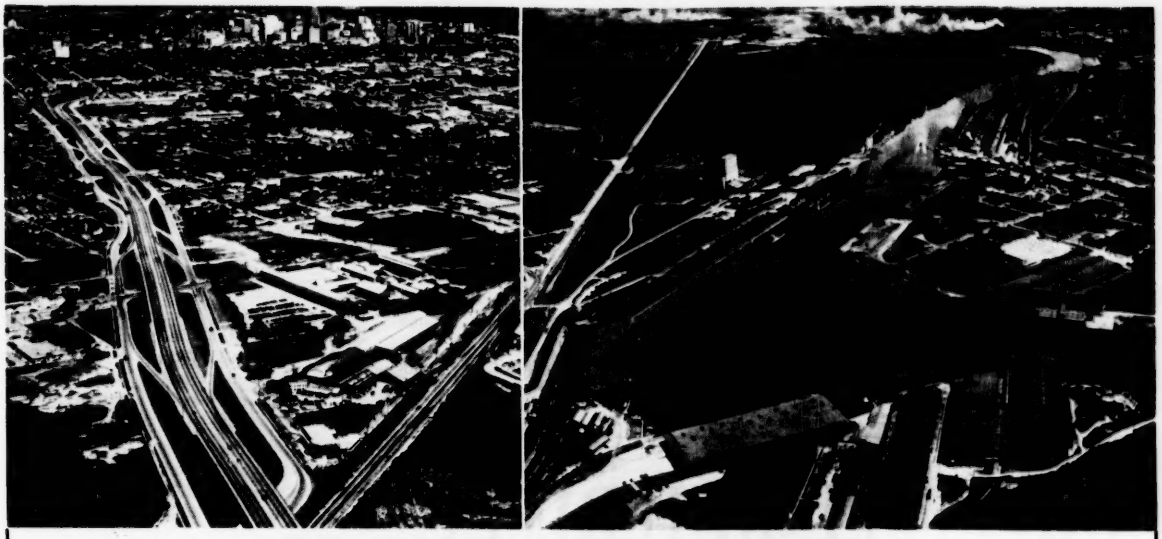
That's a lot of power . . . and the demand grows constantly. Especially in the Texas Gulf Coast area, where industrial expansion makes statistics obsolete almost as they are compiled.

These tremendous demands for natural gas are being met. There's fuel for all in Texas' immense reserves of natural gas—more than 50 per cent of the nation's total! The abundance of this clean, economical industrial fuel in the Gulf Coast region means more power to the manufacturers of this state . . . and, in your new plant of the future in coastal Texas, *more power to you!*

HOUSTON Natural Gas SYSTEM

"A Texas Gulf Coast Service Institution"

FRANK C. SMITH, *President*



BY LAND AND BY SEA--

Because of its many advantages, Houston and the Texas Gulf Coast is attracting an ever mounting migration of industry. A desirable combination of factors has resulted in an unequalled atmosphere for industrial development. Not the least of these factors is a complete network of water, rail, highway and air transportation.

The growth of Houston as a commercial and industrial center, now the largest city in the South, merits your interest. A look at the following data should be proof enough . . .

LABOR FORCE AND EMPLOYMENT, HARRIS COUNTY

	Dec-1952	Nov-1952	Dec-1951	June-1950	War Peak Oct-1943	April-1940
Total Labor Force	376,475	369,070	360,920	345,075	310,000	234,900
Unemployment	7,500	7,800	7,000	15,000	4,000	23,000
Employment	368,975	361,270	353,920	330,075	306,000	211,900
Non-Agricultural	361,975	354,270	346,920	322,575	300,000	204,900
Agricultural	7,000	7,000	7,000	7,500	6,000	7,000

DWELLING UNITS COMPLETED IN HARRIS COUNTY IN 1952 16,903

NON-RESIDENTIAL CONSTRUCTION CONTRACT AWARDS

Harris County, Texas

	Totals for 1952
1. COMMERCIAL AND INDUSTRIAL:	$68,913,899
2. CHURCHES:	4,467,129
3. SCHOOLS:	10,086,176
4. PUBLIC WORKS:	30,408,896
5. PUBLIC UTILITIES:	35,530,966
Grand Total	$149,407,066

Note: This tabulation is based on data received from THE A.G.C. NEWS SERVICE, Gulf Coast Piping Contractors Association, Houston Independent School District, Department of Public Works and Utilities, the City of Houston, Houston public utility companies and many others.

NON-RESIDENTIAL CONSUMPTION OF ELECTRIC CURRENT AND NATURAL GAS; AND VOLUME OF PORT AND RAILROAD TONNAGE

	Totals for the Year Twelve Months, 1952
NON-RESIDENTIAL CONSUMPTION OF ELECTRIC CURRENT, in M-KWH (Harris County)	2,202,401
NON-RESIDENTIAL CONSUMPTION OF NATURAL GAS, in MCF (Harris County)	191,163,071
RAILROAD FREIGHT HANDLED AT HOUSTON	16,053,972
TONNAGE HANDLED BY THE PORT OF HOUSTON In Short Tons	45,497,931

UTILITY CONNECTIONS — HOUSTON AND HARRIS COUNTY

	December, 1952	Total New Connections for 1952
ELECTRIC CURRENT CUSTOMERS, Harris County*	298,119	34,722
NATURAL GAS CUSTOMERS, Harris County*	272,025	36,953
TELEPHONES IN SERVICE IN THE "HOUSTON DISTRICT EXCHANGE"	336,411	28,031
WATER METER CONNECTIONS—Houston Corporate Limits Only	124,034	9,680

*Note that these figures represent the number of customers, not the number of meters in service.

TOTAL RETAIL SALES

1952 compared with 1951 ..... +8.0%

DEPARTMENT STORE SALES

1952 compared with 1951 ..... +10.0%

For additional information regarding plant locations and operations in Houston write: Director of Industrial Development, Houston Chamber of Commerce, P. O. Box 2371, Houston 1, Texas.

"HOUSTON: AMERICA'S INDUSTRIAL FRONTIER"

Allis-Chalmers Assumes Operation Of Buda Co.

The Allis-Chalmers Manufacturing Company, on November 1st, officially assumed operation of The Buda Company, 72-year-old Harvey, Ill., firm, according to W. A. Roberts, Allis-Chalmers president.

Roberts said that this addition to his company would be operated as "The Buda Company, a division of Allis-Chalmers."

"Ralph K. Mangan, with Buda for 36 years and president since 1950, will be in charge of the division with the title of president and general manager," added Roberts.

"Operating as a division of Allis-Chalmers, The Buda Company will continue to manufacture, distribute and service all items in its regular line of products."

"We intend making, if anything, a more extensive sales effort in all the businesses in which Buda previously has engaged," said Roberts.

Mangan said that he welcomed the greater opportunities provided by the change.

"Our people are proud of the bright history of The Buda Company. We look forward to a period of continued progress and advancement in our new association," Mangan said.

Transfer of the assets of The Buda Company to Allis-Chalmers was at the rate of one share of Allis-Chalmers common stock for each 2-1/6 common shares of The Buda Company.

National Container Inspects New Mill

The board of directors of National Container Corporation held its meeting on October 24 at the company's new $25,000,000 kraft pulp, board and paper mill now at the final stage of completion near Valdosta in the heart of southwestern Georgia's great pine forests. The directors last met as a group in Valdosta at the ground-breaking ceremonies in Oct., 1951 when this mill was begun as the largest project in National Container's 25-year history.

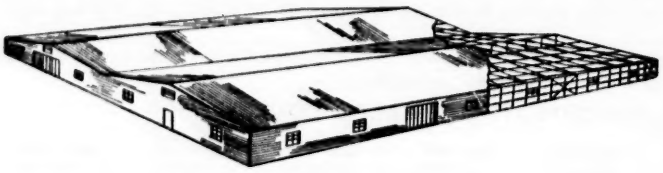
The directors, who usually hold their meetings in the company's New York headquarters, voted the regular quarterly dividends of 15 cents per share on the common stock, and 31¼ cents per share on the $25 par value preferred stock. The common dividend is payable Dec. 31, 1953 to stockholders of record at the close of business Dec. 1, 1953, and the preferred dividend is payable Dec. 10, 1953 to stockholders of record on Nov. 20, 1953.

Following the board meeting, the directors together with executives of the company's sales organization from all over the country made an inspection trip through the new mill. The trip was conducted by William T. Webster, vice-president in charge of mill operations. Representatives of the company's bankers were also present.

International Paper Expanding At Camden, Ark.

International Paper Company has begun construction of a $2 million expansion and modernization program at the company's Camden, Arkansas paper mill. The current expansion plan includes a new cooking plant, enlargement of a finishing room and the modernization of a paper machine. The company also plans to build a new personnel office, a new time building, a new bathhouse for workers and a new employe parking lot.

HOLSTEEL BUILDINGS



WE *MANUFACTURE* BUILDINGS

We learn what you want then make it and put it up for you.

Of course we stick to materials and designs we've found to be best. It must be firesafe—economical—durable, or we don't use it.

Building miles of steel buildings and roofs has taught us how to do what you want and need.

You can plan your own HOLSTEEL BUILDINGS with our Bulletin 5201. Ask for it.

HOLSTON STEEL STRUCTURES

Manufacturing Builders

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Land and Timber

FOSTORIA, TEXAS

MADISONVILLE

HOME OF THE INTERNATIONALLY FAMED SIDEWALK CATTLEMEN'S ASSOCIATION

More Cattle per Acre than any other county in Texas —due to improved Pastures.

WELCOMES YOUR FACTORY OR PLANT

Plenty of Natural Gas

TWO NEW OIL-GAS FIELDS NOW DEVELOPING

SCHOOLS

A good place to rear your children. Separate schools for colored and white. Total enrollment of 1100. Faculty of 45 teachers. Fully accredited four years of high school — both white and negro. School plants valued at $350,000.

•

Ample reserve of native labor.

•

Owner occupied farms and ranches.

CHURCHES

Fine buildings. Good leadership. Religious people.

•

Alluvial loam and sandy soil.

•

Some pottery clay.

•

Lignite deposits.

•

Pine, post oak, ash, gum, pecan, hickory, walnut, with some commercial production.

Soft artesian water and well water from 3 sands.

CLIMATE

Altitude—350 feet. Annual rainfall — 43 inches. Mean annual temperature, 67°.

•

Bounded by Trinity River on east and Navasota River on west.

•

LOW TAX ASSESSMENT RATES

All inquiries are held confidential and answered promptly

Madison County Chamber of Commerce

Madisonville, Texas

FACT or FICTION?

Some folks say burning the woods kills boll weevils. These people are only fooling themselves, because burning the woods kills trees — not boll weevils. Woods fires cost you money — money you should be harvesting, not burning.

HERE'S WHAT A STATE FORESTER HAS TO SAY . . .

"No matter how hot a woods fire may be, the boll weevil is not eliminated. The only victim of woods burning is the farmer's valuable tree crop. Thorough studies have proved conclusively and definitely that the custom of woods burning to kill boll weevils is ineffective and wasteful."

—Guyton DeLoach, *Director*
Georgia Forestry Commission

FARMERS OWN MORE THAN ONE-THIRD OF THE SOUTH'S COMMERCIAL WOODLAND

SOUTHLAND PAPER MILLS, INC.

LUFKIN, TEXAS

Newsprint • High Grade Container Board

MILL "A" TRINITY, TEXAS — LUMBER DIVISION — MILL "B" NEW WILLARD, TEXAS

Statler Breaks Ground For 1,001-Room Dallas Hotel

Ground was broken last month in Dallas, Texas for one of the largest hotels to be built anywhere in the world in more than a quarter of a century, the 1,001-room Dallas Statler.

Participating in the ground breaking ceremonies were Mayor R. L. Thornton of Dallas, civic and business leaders of the community and state, and Arthur F. Douglas and William L. Marcy, president and board chairman respectively of Statler.

The hotel's design has aroused nationwide interest among architects and engineers because it embodies strikingly new building techniques which are expected to influence future skyscraper construction in metropolitan areas.

The hotel, to rise 18 stories in downtown Dallas, will be the first multistoried building to make full use of "flat-slab cantilever" construction. Employment of the cantilever principle, according to the architect, William B. Tabler of New York City, eliminates about half the columns and footings necessary in older type buildings. Besides lessening costs, Mr. Tabler says, this is of great practical advantage since columns either have to be concealed, or, where this is not possible in a public room, given an exterior beautifying treatment. Even when given this treatment they still obscure the view.

A scale model of the hotel, exhibited at a reception at Dallas' Brook Hollow Golf Club at which Statler was host to more than 1,000 guests, shows the new hotel will be a "United-Nations" type building, the first of this ultra-modern design in Dallas. Exterior walls appear to be of glass and aluminum. Actually, however, the hotel will be different from other buildings of this type, so far erected, in that part of the wall surface that appears to be glass will be of metal treated with porcelain to give a glass-like texture.

The exterior walls will be prefabricated in sections. Sectional prefabrication will expedite construction and enable the general contractor, Robert E. McKee, General Contractor, Inc., of Dallas, to complete the building in the late summer of 1955.

Other features of the hotel, according to Mr. Douglas, include a radio-television set in every guest room, air-conditioning throughout the building, new type bathrooms with a "dressing-room" atmosphere, and radio music in self-leveling elevators.

Allied Chemical & Dye Opens Virginia Center

"The most startling developments in chemistry in the next few years will be in the organic field, based largely on petroleum derivatives and natural gas," Hugo Riemer, president of Nitrogen Division, Allied Chemical & Dye Corporation, predicted last week.

Speaking at the opening of the organic development center of Nitrogen Division at Hopewell, Virginia, Mr. Riemer expressed the view that "although the older inorganic branch of the chemical industry will continue to expand, the rapidly growing field of organic chemistry promises to become equally as large.

"Organic chemistry is the most rapidly growing phase of our industry and has been responsible for a large part of the industry's recent expansion," he declared. "The purpose of this development center is to expand our participation in the organic field, at the same time continuing our nitrogen research on a broad basis."

Dazey Elects Miller Vice President, Manufacturing

The election of L. J. Miller as Vice President in charge of manufacturing for Dazey Corporation by the Company Directors was made known by William E. Gundelfinger, President, who said that the promotion was in recognition of the outstanding record Miller has made.

Mr. Miller joined Dazey Corporation in 1947 as Plant Manager. The new Vice President has a background of many years' experience in fabricating and manufacturing housewares.

Mr. Miller started his career in 1926 at the Galvin Electric Company.

IN GULF SHIPPING— LOOK TO LYKES FOR Experience!

From sailing ships to modern cargoliners — that's the LYKES experience story. The result? A world-wide shipping service geared to your export-import needs. Benefit by frequent, regular sailings . . . fast loading and unloading . . . American flag standards throughout.

Specify "Via GULF PORTS and LYKES!"

Travel, too, by Lykes Cargoliners!

Delightful passenger accommodations are a part of each Lykes vessel. Plan ahead—we're listing reservations now for sailings through April.

For folders on Lykes freight and passenger services, and answers to questions on passenger, freight or trade development matters, please write us at Dept. S, New Orleans, La.

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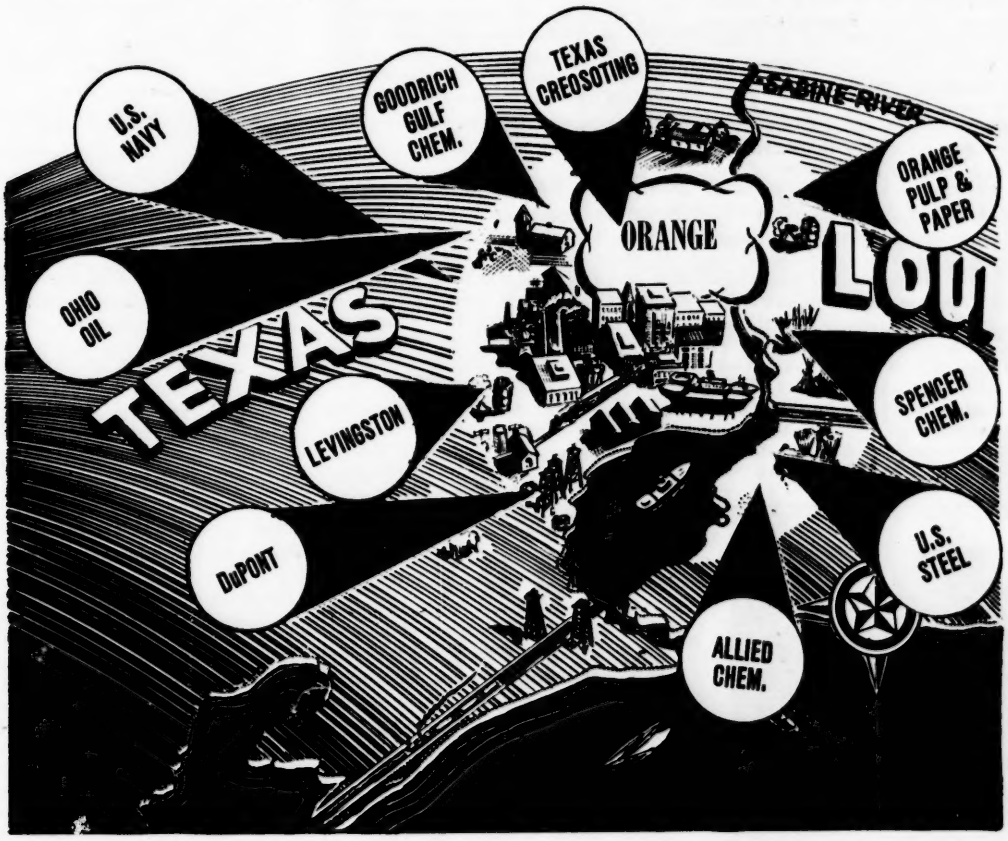
6 LYKES TRADE ROUTES
- U. K. LINE
- CONTINENT LINE
- MEDITERRANEAN LINE
- AFRICA LINE
- ORIENT LINE
- CARIBBEAN LINE

The Gateway to the Industrial Southwest



The Companies Shown Above, are Now Located in Orange

There Must Be Good Reasons WHY!!

STILL AVAILABLE:

- Plant Sites
- Deep Water
- Fresh Water
- Good Labor
- Raw Materials
- Power
- Natural Gas
- 3 Railroads

—In a Friendly Community!

HERE'S WHAT THE PRESS SAYS ABOUT ORANGE:

Wall Street Journal:
. . . a thriving chemical center.

Chemical Week:
. . . a standout in Texas.

The Houston Post:
. . . a giant in the making.

Manufacturers Record:
. . . destined to become one of the greatest cities on the gulf coast.

Beaumont Journal:
. . . Orange picture bright as new industries move in.

The Houston Chronicle:
. . . in the dismal industrial water scarcity picture along the Texas gulf coast—a scarcity which threatens to throttle the tremendous industrial growth of the coastal area — Orange stands out like a lighthouse in a fog!

Gulf States Utilities Plain Talks:
. . . Watch out for Orange—Big Growth Seen Likely.

The Orange Leader:
Retail sales climbing here . . . as result of great new industries.

Beaumont Enterprise:
. . . Don't look now, but Orange is landing industries right and left.

Monthly Business Review, Federal Reserve Bank:
. . . an abundant supply of water is immediately available and Sabine River Authority plans series of upstream dams which will increase supply materially.

Come See for Yourself.

ORANGE INDUSTRIAL DEVELOPMENT COMMITTEE

Affiliate of the ORANGE Chamber of Commerce **Phone: 8 3263** **ORANGE, TEXAS**

K. C. Southern To Lease Warehouse Facility

A 100,000-square-foot building is being erected by a group of Kansas City investors at near-by Grandview, Mo. The building will be leased by Kansas City Southern Lines, for use as a transit warehouse for goods shipped on the system.

The facility is on a 6½-acre site, part of a tract acquired by the Southern Development company, a subsidiary of the railway. The cost is estimated to be a half-million dollars.

Of primary importance in the transit storage plan is the matter of speed. To this end, the warehouse will be an accommodation to manufacturers and large distributors to facilitate supply of their products to users in the Middle West. It will, for instance, permit a New York manufacturer to stock quantities of his merchandise at Grandview for quick carload movement to Texas, Louisiana or other southern destinations. The transit storage plan will, of course, work the other way, too, with southern manufacturers storing products in the warehouse for later distribution to northern, eastern and western points.

Rail facilities will permit the loading or unloading of six cars at a time. Truck dock space for three trucks also will be a feature, and less-than-carload lots will be moved from the warehouse principally by truck.

Southwest Research Expands Services

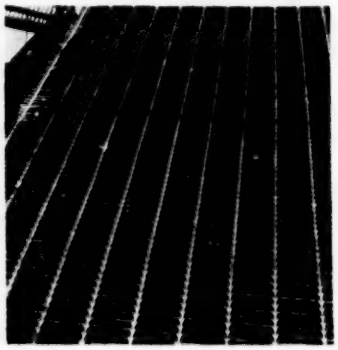
In order to facilitate the exchange of new scientific information, Southwest Research Institute is expanding its public service program to include publication of a monthly technical calendar for free distribution to 25,000 scientists and engineers in the region.

In announcing the new publication, Dr. Harold Vagtborg, institute president, appointed Charles E. Balleisen, former supervisor of the nonprofit industrial research institute's engineering mechanics laboratory, to the full-time post of editor of the pamphlet.

Dr. Vagtborg said the publication, whose first issue will appear January 1, will be sent to all members of technical organizations in Louisiana, Oklahoma, Arkansas, New Mexico, Arizona and Texas, the regional area which the institute is seeking to assist in industrial development.

"There is an increasing need for better communication among scientists and engineers in the area," Dr. Vagtborg asserted. "The Southwest Technical Calendar will assist in disseminating newly-discovered scientific knowledge principally by listing meetings of technical groups in the six-state region so that all interested people may attend."

Pointing to the vast upsurge of petroleum and chemical industrial activity in the Southwest and Gulf Coast areas, Vagtborg mentioned that since the institute was created solely to assist in this growth, the technical publication would be another contribution in that program.



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Send for attractive paper-weight sample, which is yours for the asking. Catalogues upon request.

Square edge bars for safe footing.
Hexagonal cross bars for neat appearance.

Gary-Riveted Grating :: Gary Stair Treads

Standard Steel Spring *Division of*

ROCKWELL SPRING AND AXLE COMPANY

4000 East Seventh Ave., Gary, Indiana

Shell Chemical To Build Plant In Louisiana

Shell Chemical Corp., a subsidiary of the Shell Oil Company, will build a chemical plant at Norco, La., above New Orleans. The new unit will be capable of producing 25 million pounds of glycerine per year. Also to be produced at the plant is epichlorophydrin, a component of many chemical products. The new chemical unit is designed to operate in conjunction with the Shell Oil Company's refinery at Norco and will use propylene and other feed stocks produced there.

Fourco Glass Lists $3 Million Expansion

Fourco Glass Company has announced plans to spend $3 million on an expansion and improvement program at the company's Fort Smith, Arkansas window glass plant. A contract exceeding $1 million has already been awarded for preliminary construction. The plant which has been in operation since 1936 now employs over 600 workers.

SERVING THE CONSTRUCTION INDUSTRY OF THE SOUTHWEST

TRANSIT-MIX CONCRETE

GIFFORD-HILL COMPANIES

DALLAS • FORT WORTH • WACO • TEXARKANA • LONGVIEW
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SAND AND GRAVEL • CONCRETE PIPE • CONTRACTORS' SUPPLIES

Sealy

Out of the conjested industrial area--yet close to All the Advantages!

Two Main Line Railroads—
Santa Fe and Southern Pacific.

U. S. Highway 90—
Main highway between Houston and San Antonio, and also on State Highway 36.

50 Miles from Deep Water Ports

Large Water Supply

Unlimited Natural Gas

Cheap Electricity

Low Cost Industrial Sites—
Completely surrounded by farms, largely operated by owners, producing Rice, Cotton, Peanuts, Watermelons, Cattle and Poultry.

Large Labor Supply—
Native-born, friendly to industry.

Sensible Tax Rates—
Read the article on taxes, labor laws, etc. in this issue.

SALT AND SULPHUR PRODUCED NEARBY

Write for Details Pertaining to Your Needs—or better yet, pay us a visit.

SEALY CHAMBER OF COMMERCE

Walter Dierschke, President **SEALY, TEXAS**

is the site of the newest, most modern all-electric sawmill ever constructed in the South.

This new plant, now under construction, along with our forest lands, consisting of approximately 550,000 acres, assures Texas of a perpetual supply of quality Southern Pine lumber.

KIRBY LUMBER CORPORATION

HOUSTON • TEXAS

FINANCIAL NOTES

Directors of **The Youngstown Sheet and Tube Company** have declared a cash dividend of 75 cents a common share, payable Dec. 15, 1953, to shareholders of record at the close of business on Nov. 13, 1953.

• • •

Net earnings for **Temco Aircraft Corporation, Dallas, Tex.,** for the nine months period ending September 30 amounted to $1,499,280 or $1.34 per share, as compared to $1,359,894 or $1.21 per share for the corresponding period of 1952.

Earnings per share have been computed on shares presently outstanding and held for issuance in connection with the merger of Luscombe Airplane Corporation into Temco which was consummated as at March 31, 1953.

Sales for the current nine months' period were $41,888,179 as compared to $38,862,412 for the same period last year, an increase of $3,025,767 or 7.78 per cent.

• • •

Earnings of **Mathieson Chemical Corporation** for the nine months to September 30, 1953, of $13,806,153 or $2.53 per share on the 5,463,773 shares outstanding on that date.

These compare with earnings of $10,915,458 or $2.00 per share for Mathieson and Squibb combined in 1952. The merger with E. R. Squibb & Sons took place on October 1, 1952.

Earnings for the third quarter amounted to $4,977,520 or 91 cents per share, compared with 70 cents per share for the two companies in 1952.

Sales for the nine-month period and third quarter, respectively, were $184,074,445 and $60,385,994, compared with $162,134,699 and $54,536,509 for both companies prior to the merger in 1952.

Mathieson alone in 1952 earned $8,305,998 or $2.64 per share for the nine months and $3,170,482 or $1.01 per share for the third quarter.

• • •

Net sales of **International Minerals & Chemical Corporation** for the first three months of the current fiscal year ended September 30, 1953 were $17,342,962 compared with $17,159,301 for the corresponding three-month period ended September 30, 1952, according to an announcement by Louis Ware, president.

Earnings before income taxes for the three months ended September 30, 1953 were $1,494,025 as compared with $1,521,784 for the corresponding period the year before.

Net earnings after taxes for the three months ended September 30, 1953 were $1,046,025 compared with $1,064,784 for the corresponding period the year before.

Earnings per common share for the three months ended September 30, 1953 were equivalent to 41 cents computed on the basis of 2,316,199 shares currently outstanding compared with 44 cents per share on the basis of 2,204,885 shares outstanding at September 30, 1952.

• • •

A quarterly dividend of 25 cents per share on the common stock of **Texas Eastern Transmission Corporation** was declared by the board of directors of the company at a meeting on October 30. The dividend is payable December 1, 1953, to stockholders of record at the close of business November 6, 1953.

• • •

Lion Oil Company, El Dorado, Ark., reports in a statement released recently that net income of the company for the third quarter, after provisions for taxes on income, was $2,204,052 or 71 cents per share, an increase of 11 per cent over the $1,979,946 or 64 cents per share in the same period a year ago.

For the nine months ended September 30, net income was $7,449,910 or $2.41 per share, compared with $7,528,068 or $2.44 per share last year.

Sales and operating revenues in the nine-month period were $68,157,823, as against $65,287,765 for the like period in 1952. Operating charges were likewise higher and amounted to $55,371,060, versus $52,471,244. Net income before tax provisions amounted to $12,371,155 as against $12,389,842.

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Ruberoid Stonewall *asbestos-cement* Board is ideal for interior or exterior construction . . . cuts building costs . . . saves maintenance expense. It is fireproof, water-resistant, rot-proof, rat-proof, rust-proof . . . never needs paint. It is strong and rigid, yet bendable and easy-to-work. Can be sawed or scored and broken to size. Takes nails readily.

Use Stonewall Board for ducts, partitions, shower stalls, fire barriers, bins, exterior sheathing, arched roofs, etc. Write today for literature, cost and where to buy it. The Ruberoid Co., 500 Fifth Ave., New York 36, N. Y.

The RUBEROID Co.

ASPHALT AND ASBESTOS BUILDING MATERIALS

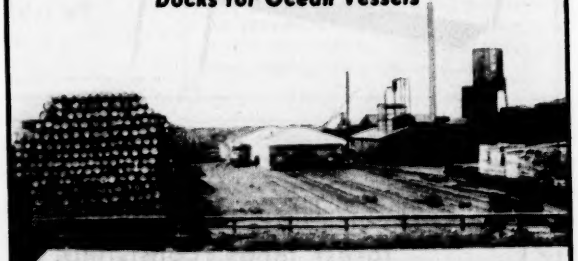
CREOSOTED

Piling, Poles, Lumber, Cross Arms, Cross Ties

Also Penta- and Salt-Treated Lumber

Decay and Termite Proof

Docks for Ocean Vessels



American Creosote Works, Inc.

New Orleans, La.

Plants at New Orleans; Winnfield, La.; Louisville, Miss.; Jackson, Tenn.

LOCATE IN SHERMAN, TEXAS

THE CITY OF DIVERSIFIED INDUSTRY

Sherman Offers

- ★ CHOICE INDUSTRIAL SITES
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- ★ GOOD TRANSPORTATION FACILITIES
- ★ ABUNDANT WATER, GAS & ELECTRICITY
- ★ FAVORABLE TAX RATES

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MRS. TUCKERS — POOL MFG.
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INDUSTRIAL DEPARTMENT
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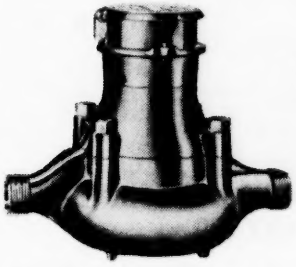
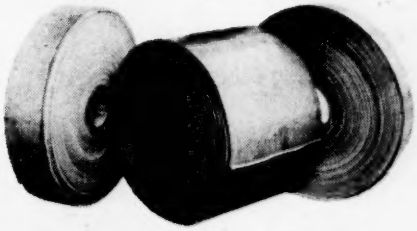


CALMET WATER METERS

Built for accuracy, long life, low upkeep. The slower moving oscillating piston, and slow moving gear train contributing to long life and enduring accuracy. Frost proof bolts prevent freezing damage.



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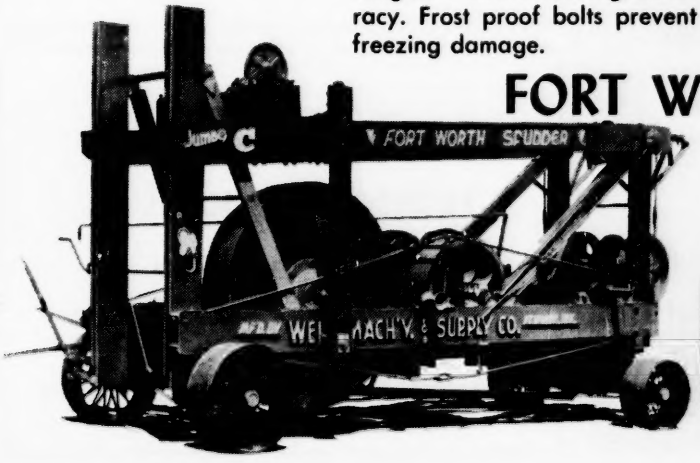

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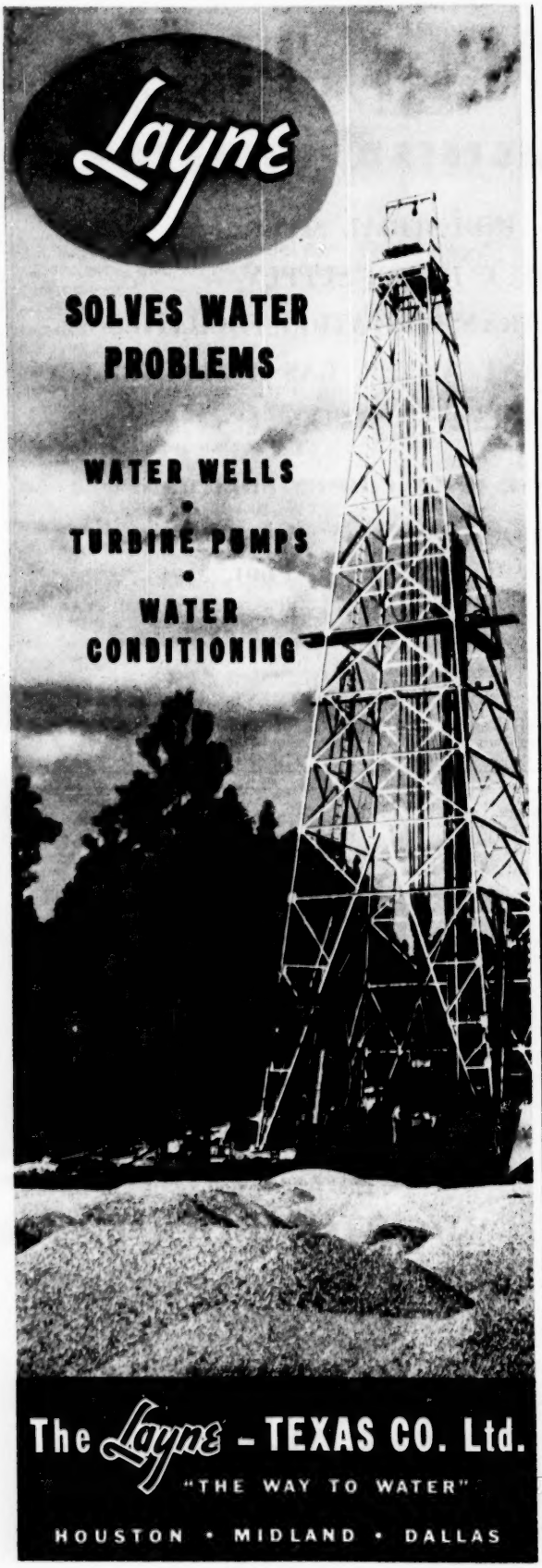

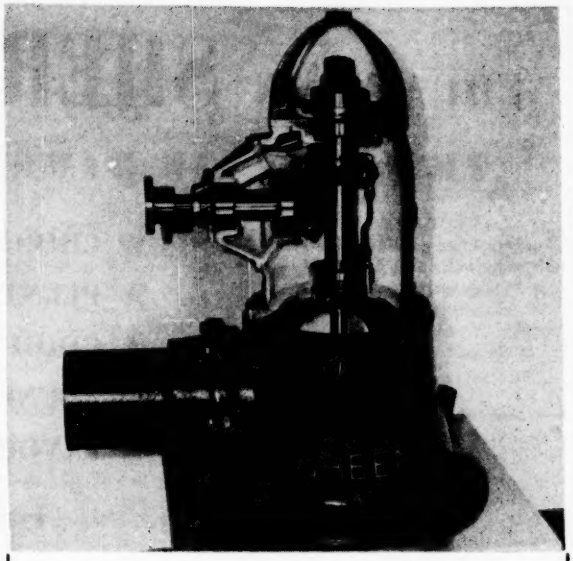

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Texas Power & Light Company provides Tyler with dependable and economical electric power.

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Tyler is the center of one of the nation's largest gas reserves, proximity to the vast East Texas natural gas field assuring a plentiful supply of this low-cost fuel.

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The daily supply of municipal water is 39,000,000 gallons, and is more than double the present peak load.

TYLER INDUSTRIAL FOUNDATION, INC., constructs buildings for manufacturers, according to their specifications, giving the manufacturer an option to purchase the property at its exact cost during the lifetime of the lease.

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P. O. Box 390, Tyler, Texas

Tyler Chamber of Commerce

WHO'S WHERE

Hugh A. Bullock has been appointed product manager for anti-freeze sales for the **Mathieson Chemical Corporation, Baltimore, Md.,** W. Adrian King, vice president and director of sales of Mathieson's Hydrocarbon Chemicals Division has announced.

Mr. Bullock formerly was national account sales manager for The Crescent Company, Inc., of Pawtucket, Rhode Island. Earlier he was assistant national sales manager of the Anderson Company, Gary, Indiana.

• • •

Richard T. Burke, a sales engineer, has been added to the Houston staff of **Tube Turns, Inc.**

Burke was born in Louisville and attended Massachusetts Institute of Technology. He joined Tube Turns, Inc., in 1949 and originally was stationed at Midland, Texas.

Tube Turns, Inc., which has its headquarters in Louisville, is the nation's oldest and largest manufacturer of forged seamless welding fittings and flanges.

• • •

Gordon E. Brooks has been named Atlanta Sales Representative of the **Atlantic Steel Company,** effective November first.

Brooks joined Atlantic Steel in 1933, and has served in the company's order and scheduling departments, as well as in various sales capacities. Since 1948, he has been Sales Representative in north and central Georgia for Dixisteel.

• • •

Two sales-engineering representatives have been added to the staff of **Tube Turns, Inc., Louisville, Ky.** They are **Bert Grant,** assigned to the Pittsburgh office, and **Clyde Chronister,** assigned to the Tulsa office.

• • •

Edward Valves, Inc., East Chicago, Indiana, has announced the appointment of **H. W. Bierman** as sales engineer for the territory comprising the state of Oklahoma and parts of Missouri, Kansas, Arkansas and Texas.

Bierman formerly located at the Edward home office will make his headquarters at the Rockwell Manufacturing Co. offices in Tulsa, Okla. Edward Valves, Inc., markets a complete line of cast and forged steel valves for petroleum, power plant, and other industrial and technological services.

• • •

The appointment of **John G. Hamm** as manager of the **St. Louis sales office** has been announced by **The Trane Company, La Crosse, Wisconsin,** manufacturers of air-conditioning, heating and ventilating equipment.

Hamm was formerly associated with the firm's St. Paul (Minn.) sales office for the past seven years. He has a B.S. degree in mechanical engineering from the University of Minnesota, and is a graduate of the 1946 Trane Graduate Training course.

The Atlantic Coast Line Railroad Company has announced the following appointments, effective November 1: **C. W. Balch** has been named general agent and **R. A. Balkcom,** commercial agent with headquarters at 657 Monadnock Building, San Francisco, California.

A. C. Engle has been appointed commercial agent at Chicago, Ill., **C. W. Morton, Jr.,** commercial agent, Tampa, Fla., and **J. L. Mills,** freight service agent, St. Petersburg, Fla.

• • •

The Nashville, Chattanooga & St. Louis Railway has announced the following appointments, effective November 1: **S. M. Dickerson** has been named assistant general freight agent, with offices in Union Station, Nashville, Tenn.

The position of assistant to freight traffic manager, formerly held by Mr. Dickerson, has been abolished.

E. I. Bowman, formerly assistant general freight agent-rates, has been named assistant general freight agent-divisions, succeeding **G. W. Sloan,** retired.

• • •

Alden E. Calkins, as of November 1, 1953, has been named as publicity and public relations representative of **Stone & Webster, Incorporated,** and affiliated companies.

Mr. Calkins' office at 350 Fifth Avenue (under his name), New York 1, N. Y., PEnnsylvania 6-0578, is ready to serve you fully with suitable copy and photographs, generate ideas, and follow up any leads that you may wish developed.

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80 acres—30 choice sites
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60 acres
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■ **FORT WORTH & DENVER INDUSTRIAL SITE**

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Served directly by Fort Worth and
Denver main track and spurs

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TIMES & RECORD-NEWS

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BUSINESS NOTES

"What's the Difference in Wire Rope?", a new brochure available from Leschen, answers questions which may be in the minds of wire rope buyers. It explains differences in the selection of wire going into various rope, and differences in manufacturing processes. It also itemizes differences in results. This informative brochure may be obtained by writing **Leschen Wire Rope Division, H. K. Porter Company, Inc., St. Louis 12, Missouri.**

• • •

The Labor Relations Division of **Reynolds Metals Company** has been transferred to Richmond from Louisville, according to an announcement by J. Louis Reynolds, vice-president in charge of operations.

Heading the division is **Frank Weikel**, director of labor relations, with offices in the WRNL Building, Richmond.

Others who have moved to Richmond from Louisville are **H. H. Bode**, chief wage engineer; **James B. Johnson**, assistant wage engineer, and the following staff assistants: **Morris C. Dare, Ottis MacBeth, Lee W. Roth, J. T. Quick, Jr.**, and **Miss Virginia C. Sweazey**, secretary. Mr. Quick has been working out of Richmond.

Carlton Best, another member of the firm's labor relations staff, will remain in Louisville to handle problems in that area. His office is located at Reynolds Plant 9, 2827 Hale.

Mr. Reynolds said that the transfer was part of a move to centralize at the main office of Reynolds Metals Company all of the divisions connected with the operations of the company.

• • •

A new sales district covering Texas, Louisiana and Oklahoma has been established by **Leschen Wire Rope Division, H. K. Porter Company, Inc., St. Louis,** it was announced by D. W. Vernon, Vice President and General Manager.

The new district has headquarters in Houston, Tex., and will be managed by **F. E. Suder.** Mr. Suder has been with the Porter organization in various capacities since 1951. He has held sales and management positions with National Supply Co. and International Derrick and Equipment Co. before becoming associated with Porter.

• • •

Marlow Pumps, Ridgewood, N. J., the world's largest manufacturer of self-priming centrifugal pumps, merges as of December 1st with the **Bell & Gossett Company, Morton Grove, Illinois,** manufacturers of hot water circulating pumps, universal pumps, heat exchangers, flow control valves and other heating specialties. According to an announcement made by **A. S. Marlow, Jr.,** President, the joining of Marlow with Bell & Gossett makes the new combination one of the largest of its type in industry.

Marlow Pumps, with its main plant in Ridgewood, N. J., and a branch plant in De Queen, Arkansas, as well as licensed plants in France and England, will continue its present line under the Marlow name. Additional production capacity will be added in the east to manufacture Bell & Gosssett's products. Both product lines retain their individual identity throughout sales, marketing and distribution.

Under the new set-up, Marlow Pumps will be known as the Marlow Division of Bell & Gossett.

• • •

Two executives were promoted to top operating posts in the New Haven and Trenton Works of the **American Steel & Wire Division,** it was announced by Geo. A. Gleason, manager of operations for the division of the **United States Steel Corporation.**

Edwin E. Caspell, who has been works superintendent at the New Haven plant, is appointed general superintendent of the New Haven, Conn., and Trenton, N. J., plants. Succeeding Mr. Caspell as superintendent of New Haven Works is **John J. Grimes, Jr.,** who has been superintendent of the wire rope department at the Trenton plant.

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IF YOU WANT TO LOCATE YOUR FACTORY THEN LET US MAKE AN OFFER.

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Pan-Am Southern Head Discusses Arkansas Oil

Barring the possibilities of the discovery of some new major oil field in the state, the petroleum industry in Arkansas will proceed on about the same plane in the next 10 years that it now occupies, Bruce K. Brown, President of Pan-Am Southern Corporation, stated recently.

Mr. Brown, whose company has its home offices in New Orleans and operates the largest Arkansas petroleum refinery at El Dorado, spoke before the Arkansas Independent Oil Marketers Association, Inc., at Little Rock.

Commenting on what he termed a healthy situation in the production, refining and transportation of petroleum and its products, Mr. Brown expressed a belief that "crude oil production in South Arkansas has hit a plateau and will go neither uphill or downhill very soon."

"Because so much of the crude available is already refined in the state and used in the state and because we already export both crude oil and products, I could not anticipate that there would be much more expansion in petroleum refining," he said.

"Of course, all I am saying can be changed overnight by a lucky strike in the Arkansas Valley or the Desha Basin and I hope that occurs," he continued.

Mr. Brown said that "while commercial production of crude oil is, and always has been, confined to the Southern counties, the whole Arkansas Valley in West Central Arkansas is similar geologically to the North Mississippi area where oil is now being produced out of the Knox Dolomite."

"Recent success in Mississippi has stimulated new interest in the search for oil in the Arkansas Valley where, to date, only natural gas has been produced," he said. "South Eastern Arkansas has been very alluring to the oil searchers. The counties in the Desha Basin (Desha, Phillips, Arkansas, Lincoln and Drew), are geologically interesting but thus far they have been commercially most disappointing.

Last year, 115 "wildcat" wells were drilled in Arkansas, Mr. Brown said, and only 17 of them produced oil in commercial quantities. On a national average, only one wildcat well in nine is a producer.

A total of 426 wells—both wildcat and development wells—were drilled in 1952 in the state, he said. Development wells were described as those drilled in areas in which it is assumed that an oil field has already been located.

"Theoretically, each development well ought to develop some more oil," he stated. "Actually, almost one-third of all development wells on a national average turn out to be dry holes. Out of the total of 426 holes put down in Arkansas in 1952, 206 produced oil, 12 produced gas and 205 were dry."

In the state, 15 new oil fields and two gas fields were discovered in 1952, he continued, bringing the total number of oil fields in Arkansas to 96 and the total number of gas fields to 29.

NEW PLANTS

(*Continued from page* 22)

ST. LOUIS — Jenkinson Mfg. Co., 2526 Baldwin, let contract to H. B. Deal & Co., Inc., 5517 Manchester Ave., for factory addition. P. John Hoener & Associates, 4227 Watson Road, Archt.

ST. LOUIS — Winco Ventilator Co., 533 Bittner, let contract to O. Kubatzky & Sons, 1508 Orchid, for factory addition; est. cost $40,000.

VIENNA — Harris & Landenburg Hat Co., Lebanon, Ill., to construct $100,000 factory.

NORTH CAROLINA

CHARLOTTE — Belk Brothers Co. plan addition to building. A. G. Odell, Jr. & Assocs., 109 W. Third St., Archt.

GREENSBORO — Guilford Dairy Cooperative Association let contract to H. L. Coble Construction Co., 1705 Battleground Ave., for $152,900 ice cream plant. Mann & McLawhorn, Archt.

HICKORY — Barringer Brothers & Gaither, Inc., received bid of $61,966 from Herman Sipe & Co., Conover, for sales and service building. D. Carroll Abee, Archt.

HIGH POINT — Allied Wood Products Co. has moved its plant from Winston-Salem, occupying a building at 317 Oak St.

RALEIGH — Carolina Power & Light Co. let contract to J. M. Thompson Co. for $99,908 building. F. Carter Williams, Raleigh, Archt.

STATESVILLE — Southern Screw Co., Fritz Jensen, Pres., plans $2,000,000 expansion program.

WINSTON-SALEM — Western Electric Co. received bid from P. S. West Construction Co., Statesville, for Lexington Road plant Building No. 30. R. P. Moran, Archt.

OKLAHOMA

PRYOR — Certain-Teed Products Corporation let contract to Tankersley Construction Co., Oklahoma City, for felt mill.

TULSA — Sunray Oil Corporation let contract to Lummus Co., 2707 Wesleyan Road, Houston, for coking unit at refinery.

SOUTH CAROLINA

ANDERSON — Starr Mills Corporation Abraham Rosen, Pres., received state charter to operate as a textile manufacturer in Anderson.

N. CHARLESTON — Bird & Son, Inc., Walpole, Mass., received bid from Cecil's, Inc., 290 W. Henry St., Spartanburg, for new manufacturing plant.

CHARLESTON — Esso Standard Oil Co., 300 Gervais St., Columbia, received bids for warehouse and office for case and can plant.

GREENVILLE — H. H. Claussen's Sons, Augusta, Ga., received bids for addition to bakery, Augusta Street. Robert H. Longstre & Assoc., Lewis Plaza, Archt.

GREENVILLE — Old Colony Furniture Co. let contract to W & N Construction Co., Easley, for $69,037 building, Augusta Road. Braxton H. Williams, Archt.

GREENVILLE — Textile Hall Corporation received bids for annex to Textile Hall. Race, Forrester & Epting, Archts.

TENNESSEE

TENNESSEE — United Aircraft Corporation, Sikorsky, Division, considering locations, including Cocke County in Newport, to build $17,500,000 helicopter manufacturing plant.

BARLETT — Memphis Light, Gas & Water Division received bids for radio building, Hanker & Heyer, Archts.

CHATTANOOGA — Chattanooga Armature Works, 1215 Duncan Ave., plans addition to plant. Smith & Ashby, Archts.

CHATTANOOGA — The Indiana Farm Bureau Co-operative Association has approved plans for $300,000 grain elevator for storage of corn.

CHATTANOOGA — Vitro Corp. of America let contract to Turner Construction Co., New York, for titanium facilities for Cramet, Inc.

MEMPHIS — Bluff City Distributing Co. let contract to Wessell Construction Co. for commercial building. Walk C. Jones, Jr., Archt.

MEMPHIS — Buckman Laboratories, Inc., let contract to John E. Taylor Construction Co for addition and alterations. Wiseman & Bland, Archt.

OAK RIDGE — U. S. Atomic Energy Commission received bids for remodeling carpenter and paint shop.

(*Continued on page* 148)

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DEPARTMENT OF CONSERVATION AND DEVELOPMENT, RALEIGH, NORTH CAROLINA

Ben E. Douglas, Director

NEW PLANTS

(*Continued from page* 147)

TEXAS

ABILENE — Magnolia Petroleum Co., Fort Worth, let contract to Boyd J. McDaniel, 1925 Chestnut St., Abilene, for $125,000 office building.

ABILENE — Merchants Fast Motor Lines, 442 Locust St., will build truck terminal. F. C. Otis, 1585½ Cypress, Arcnt.

AMARILLO — Garner-Randall Motor Co., 6th & Madison Sts., plans body shop, 610 Madison Street.

AMARILLO — Morrison Supply Co. let contract to Harvey Oliver, 820 Tennessee, for $36,000 warehouse. Kerr & Shiver, 1801-D Washington, Archts.

AMARILLO — Shamrock Oil & Gas Co. plans service station.

ATHENS — Atntex Ceramics, Inc., let contract to A. H. Northcutt, Frankston, at $27,-800 for new plant on west Corsicana St.

AUSTIN — Sinclair Refining Co. let contract to Schroeder Brothers, Taylor, for $16,-245 service station, Montopolis Road & Bargas Drive. Edwin C. Kreisle, 300 W. 19th St., Archt.

BAYTOWN — Humble Oil & Refining Co., Humble Bldg., Houston, plan office building addition. Milton McGinty, 2425 Ralph St., Houston, Archt.

BEAUMONT — Central Freight Lines, P.O. Box 238, Waco, let contract to O'Rourke Construction Co., P.O. Box 7557, Houston, for freight terminal, 4 miles S. of City.

BROWNFIELD — City let contract to R. U. Robinson, 3506 Avenue Q, Lubbock, for $35,770 power plant addition.

CONROE — Conroe Telephone Co. received bids for exchange building, S.E. intersection of West Phillips St. and the Alley. Stone & Pitts, 1872 Calder Avenue, Beaumont, Archts.-Engrs.

CYPRESS — Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engineer, let contract to A. M. Oakes & Co., 2010 Marshall, Houston, for community dial building.

DALLAS — Apex Supply Co. & Lerer Realty Co. received bid from Ray Bollinger, 309 Empire Bank Bldg., for $149,237 warehouse and office building, Oak Lawn Ave. & Irving Blvd. George W. Edwards, 1509A Cochran, Archt.

DALLAS — Auto Convoy Co., 5219 E. Grand Ave., let contract to Jansen Construction Co., 1203 Powhattan, for $101,105 warehouse building, 3000 S. Haskell. Smith & Mills, Mercantile Bank Bldg., Archts.

DALLAS — Corrigan Properties, Inc., let contract to Henry C. Beck, 1st National Bank Bldg., for office building, Akard & Main Sts. Wyatt C. Hedrick, P.O. Box 5055, Archt.-Engr.

DALLAS — General Motors Corp., c/o Argonaut Realty Div., Detroit, Mich., plans $400,000 retail agency training center. Wyatt C. Hedrick, 1200 T & P Passenger Bldg., Fort Worth, Archt.-Engr.

DALLAS — Jay C. Hall, Dallas News Bldg., let contract to McFadden & Miller, 402 S. Oakland St., for $35,000 textile plant, 2807 Canton St.

DALLAS — Mason Awning & Manufacturing Co., 601 Hall St., plans office building. Heiley & Hall, 5526 Dyer St., Archts.

DALLAS — The Ruberoid Co., 2800 Singleton Blvd., received bid from Bock Construction Co., 2630 Ferris, for $59,200 employee's center building.

DALLAS — Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., let contract to Browder Construction Co., P.O. Box 4425, Station A, for alterations and additions to Dixon Dial Bldg., Lemmon Ave. Gill & Harrell & Associate, 1913 San Jacinto, Archt.

DALLAS — R. B. Stovall Co., 6543 Forest Park Road, let contract to Ernest E. Randall, 4011 Parkside, for office building, Coit Road. William E. Benson, 4347 Lover's Lane, Archt.

DALLAS — Zale Jewelry Co., 1614 Rose Ave., let contract at $231,068 to Sachs & Stevens, 2415 Butler, for office and warehouse building, Akard & Marilla Sts. Walter W. Cook, 9003 Denton Drive, Archt.

EL PASO — General Motors Corp., c/o Argonaut Realty Div., Detroit, Mich., plans $350,000 retail agency training center. Wyatt C. Hedrick, 1200 T & P Passenger Bldg., Fort Worth, Archt.-Engr.

FREEPORT — Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engineer, 308 S. Akard, Dallas, let contract to Monical & Powell, Inc., Drawer 1, Lake Jackson, for alterations and additions to present building.

GARLAND — General Motors Corp., c/o Argonaut Realty Div., Detroit, Mich., plans $400,000 retail agency training center. Wyatt C. Hedrick, 1200 T & P Passenger Bldg., Fort Worth, Archt.-Engr.

GRAND PRAIRIE — Chance Vought Aircraft Division let contract to Carpenter Brothers, 1335 Plowman St., Dallas, for test laboratory building. Jack Corrigan, Melba Bldg., Dallas, Archt.

HOUSTON — Askman Distribution Service, Inc., 1817 Ruiz St., plans $250,000 office and warehouse building, St. Emanuel St. bet. Congress & Preston Aves. Wyatt C. Hedrick, 5201 Fannin St., Archt.-Engr.

HOUSTON — J. A. Banghart, P.O. Box 2332, received bid from E. C. Cronin Construction Co., 1514 Park, for service station, Hampstead Road & Karbach St.

HOUSTON — William Cameron & Co., Inc., 1901 Cullen Blvd., let contract to Pence Construction Corp., P.O. Box 226, Houston, for $66,290 warehouse addition. Spicer & Bush, Amicalbe Bldg., Waco, Archts.-Engrs.

HOUSTON — Continental Can Co., 105 N. Greenwood St., let contract to Boohtel Corporation, 220 Bush St., San Francisco, Calif., for warehouse addition.

HOUSTON — Finnigan Estate let contract to American Construction Co., 2128 Welch St., Houston, for auto sales and service building, Main, McGowen & Travis Sts. Harvin C. Moore, 2006 W. Alabama St., Archt.

HOUSTON — General Motors Corp., c/o Argonaut Realty Div., Detroit, Mich., plans $400,000 retail agency training center. Wyatt C. Hedrick, 1200 T & P Passenger Bldg., Fort Worth, Archt.-Engr.

HOUSTON — Green-Patterson Chevrolet Co., 1707 Milam St., plans auto sales and service center, cor. South Shepherd Drive & Westheimer Ave. Irvine & Hoyt, 5519 Memorial Drive, Archts.

HOUSTON — Gulf Oil Corporation, Gulf Bldg., let contract to O. L. Allen Co., 1922 Wentworth Ave., for 3 service stations.

HOUSTON — Houston Lighting & Power Co. let contract to W. S. Bellows Construction Corp., 716 N. Everton, for office building. Robert O. Biering, 711 Electric Bldg., Archt.

HOUSTON—Moore Paper Co., 3820 Chenvert, let contract to I. Fallis, 3314 Arbor St., for rebuilding fire damaged structure and warehouse. Woestemeyer & Gaffney, 2419 Travis, Archts.

HOUSTON—Scientific Glass Blowing Co., 5502 Lawndale, let contract at $20,000 to O'Rourke Construction Co., 4011 Koehler St., for reconstruction of building.

HOUSTON — Shell Chemical Corporation let contract to Mann Construction Co., P. O. Box 1063, Pasadena, for paving plant site, W. 10th St.

HOUSTON — The Texas Co., 720 San Jacinto, let contract to E. C. Cronin Construction Co., 1514 Park, for service station cor. Hempstead Road & Karbach St.

HOUSTON—Trinity Portland Cement Co., 3515 Navigation Blvd., let contract to Austin Co., 1000 M & M Bldg., for $115,000 kiln facilities and structures at plant site.

HOUSTON — Wholesale Distributors, Inc., 414 Washington Ave., let contract to Benson Co., 2212 Waughn Drive, for warehouse. Irving R. Klein & Associates, 1317 Austin St., Archts.

LAREDO—Central Power & Light Co. received bid of $233,195 from A. E. Hinman for addition to power plant.

LONGVIEW—R & C Auto Sales plans one-story building, 408 W. Marshall Ave.

LONGVIEW—Resistol Hat Co. plans one-story building, cost $200,000. Wyatt C. Hedrick, 1200 T & P Bldg., Fort Worth, Archt.-Engr.

LUBBOCK—Plains Co-Operative Oil Mill, let contract to Joe Telford Construction Co., 120 Avenue F, for $45,000 addition to warehouse. 2901 Avenue A.

LUBBOCK — West Texas Warehouse Co., Morris Underwood, 2301 Avenue E, plan $15,372 warehouse.

MERCEDES—Gulf Oil Corporation, c/o J. W. Ratley, Supt. of Construction, P. O. Box 2140, Houston, let contract to E. J. Waitman, P.O. Box 94, Harlingen, for service station, Virginia Ave. & 2nd St.

PALESTINE—J. Hugh Miller, Ford Auto Agency, let contract to Homer McAdams, Box 83, Fairfield, for $51,355 building. Theodore S. Maffit, Sr., and Theodore S. Maffit, Jr., 510 S. Sycamore St., Archts.

MEXIA—Chamber of Commerce Industrial Commission, Blake Smith, Chairman, let contract to Browder Construction Co., P.O. Box 111, Groesbeck, for $157,357 factory building. Philip G. Norton, 1505 College Ave., Bryan, Archt.

PASADENA — Magnolia Petroleum Co., Magnolia Bldg., Houston, let contract to O. L. Allen Construction Co., 1922 Wentworth, Houston, for two service stations; $22,466.

PIERCE JUNCTION — Gulf Oil Corporation, District Supt. of Construction, Gulf Bldg., Annex, Houston, let contract to H. L. Lockhart, 203 Carson Court, Houston, for warehouse building and combination office and warehouse.

PORT LAVACA — General Telephone Co. of the Southwest, W. C. Wright, President, let contract to Commercial Contracting Co., P. O. Box 12, South San Antonio Station, San Antonio, for $109,958 exchange building. Atcheson & Atkinson, Sanford Building, Lubbock, Archts.

QUITMAN — Peoples Telephone Co-operative, Inc., plans construction of two phone buildings.

RAYMONDVILLE—General Telephone Co. of Southwest, let contract to Templeton-Cannon, 208 Central National Bank Bldg., San Angelo, for $91,810 exchange building. Atcheson & Atkinson, Sanford Bldg., Lubbock, Archts.

ROSENBERG — Radio Station KFRD let contract at apprx. $28,000 to A. B. Christ, for radio studio and transmitter building. Ernest L. Shult, 5009 Fannin St., Houston, Archt.

SAN ANGELO—General Telephone Co. of Southwest, Dallas, plans telephone headquarters building. Donald R. Goss, 707 McBurnett Bldg., Archt.

SEALY—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Henry Tiemann, Brenham, for community dial building.

SWEENEY — Phillips Petroleum Co., Barlesville, Okla., let contract to O'Rourke Construction Co., P.O. Box 7557, Houston, for warehouse at Sweeney Refinery.

TEXAS CITY — The Monsanto Chemical Co. let contract to W. S. Bellows Construction Corp., P.O. Box 2132, Houston, for research laboratory building.

TEXAS CITY — Pan American Refining Corp., Dr. Harold R. Snow, Mgr., P.O. Box 401, received bids for high pressure laboratory.

VICTORIA—Central Power & Light Co. let contract to Austin Bridge Co., P. O. Box

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1590, Dallas, for substructure and superstructure unit No. 4 for Victoria power station.

WICHITA FALLS — Perkins-Prothro Co. plans remodeling office building. Harris & Killebrew, 1202 Brook, Archts.

VIRGINIA

CHARLOTTESVILLE — Albemarle Dairy Association, Rose Hill Drive, received bids for warehouse. Stainback & Scribner, 112 Third St., N.E., Archts.

HENRICO COUNTY — Allis-Chalmers Manufacturing Co. received bids through C. W. Huff, Jr., 105 E. Cary St., Richmond, for warehouse and office building.

NEWPORT NEWS — Esso Standard Oil Co. plans 386,000-barrel bunker oil station.

PORTSMOUTH—Bell Telephone Co., 304 High St., received bids for building alterations and additions. Merrill C. Lee, 601 E. Franklin St., Archt.

RICHMOND—Branch & Co., received bid from Thorington Construction Co. for alterations to office building. Carl M. Lindner, Sr., Archt.

RICHMOND — Cooperative Seed & Farm Supply Service, Inc., received bids for addition to warehouse. C. W. Huff, 105 E. Cary St., Richmond, Archt.

ROANOKE — Valley Cadillac Oldsmobile, Inc., received bid of $179,734 from J. F. Barbour & Son for building. Smithey & Boynton, 112 Kirk Ave., S.W., Archts-Engrs.

STAUNTON—Westinghouse Electric Corporation, 401 Liberty Ave., Pittsburgh, Pa., let contract to Turner Construction Co., New York, N. Y., for new plant. Robert & Co. Associates, Archts.-Engrs.

VERONA — Westinghouse Electric Corporation let contract to Turner Construction Co., 420 Lexington Ave., New York, N. Y., for new plant. Robert & Co., Atlanta, Ga., Archts.

WARSAW — Levi Strauss & Co., Daniel Koshland, Vice-Pres., San Francisco, Calif., plans $400,000 clothing plant.

WEST VIRGINIA

CLARKSBURG — Hazel Atlas Glass Co. has permit to erect added storage space; $133,000.

FAIRMONT—Cities Service Oil Co. plans to erect five service stations.

FAIRMONT — The Jamison Coal & Coke Co. plans expenditure of $6,000,000 for huge cleaning plant and the opening of new mine.

MORGANTOWN — Pittsburgh Consolidation Coal Co. acquired Weirton Mine, near Morgantown, from National Steel Corporation.

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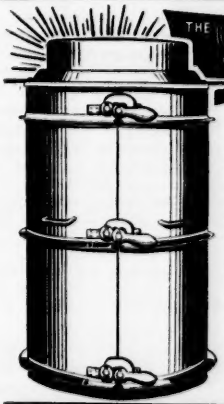

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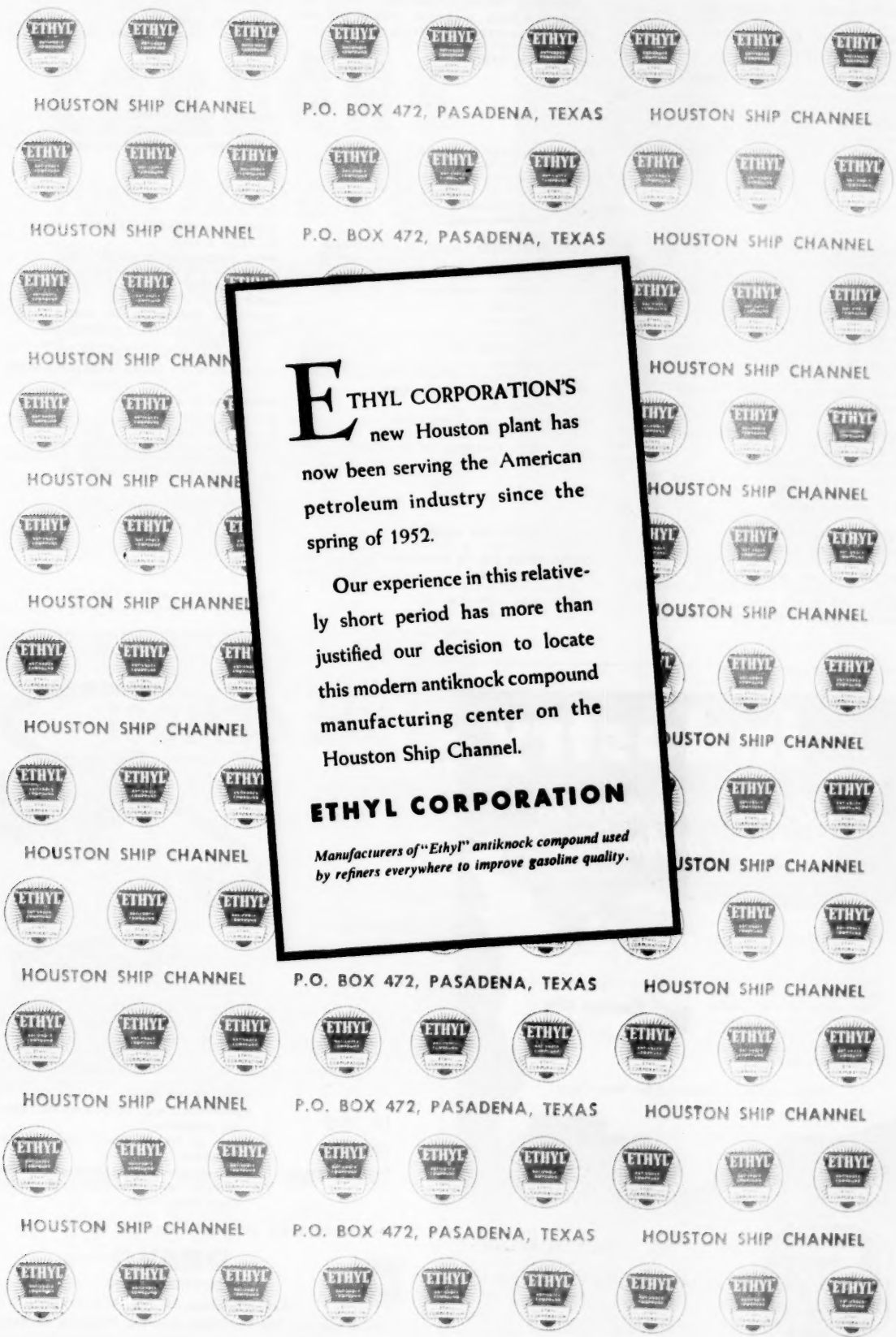
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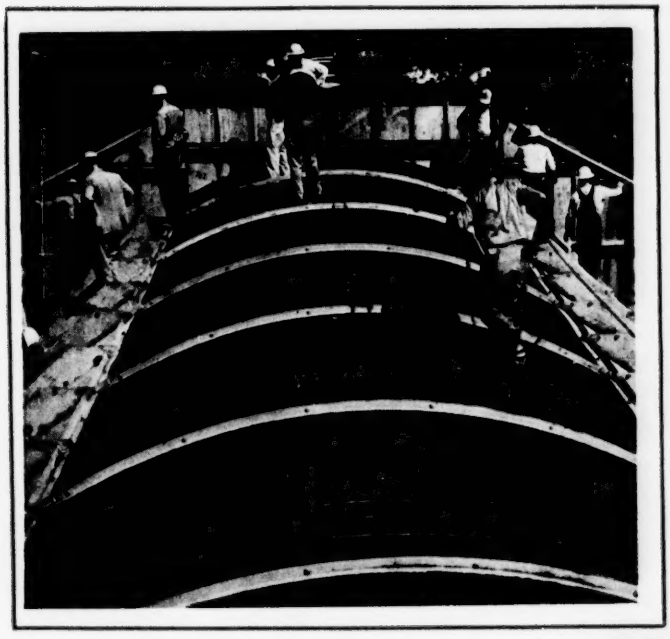

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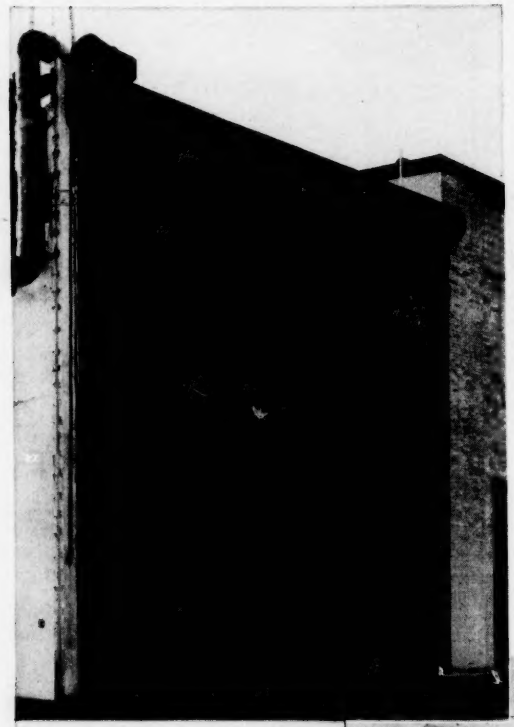

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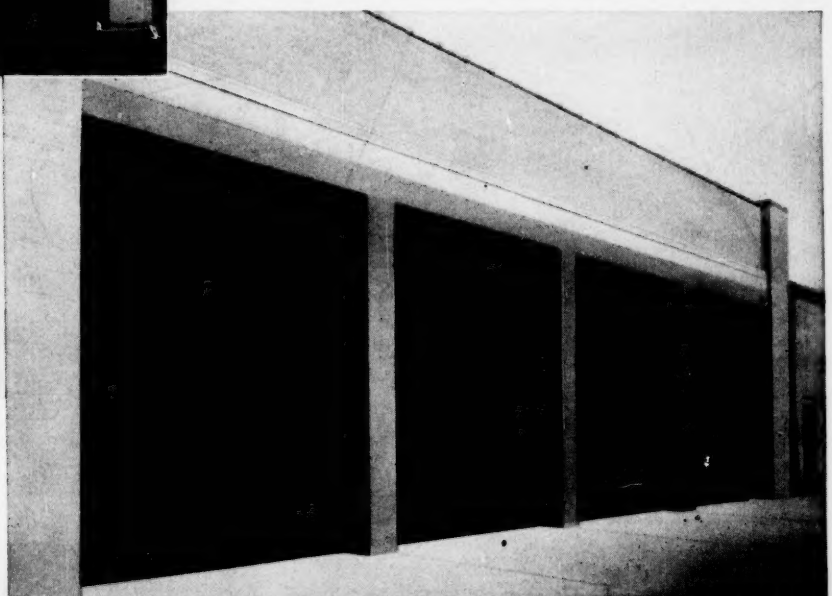

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